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PART FIRST.

ORIGINAL COMMUNICATIONS.

ART. I.—*Remarks on the Asiatic Cholera, in the City of New-York in* 1848–9. By Wm. P. Buel, M. D., late Physician to the Centre-street and Thirty-fifth-street Cholera Hospitals. [With a Map.*]

IT is not intended, in the present paper, to give more than a brief sketch of the leading features of the recent epidemic. Nor is it our design to speak extensively of the etiology, therapeutics or pathology of the disease. These subjects have been thoroughly discussed by abler pens. We pass to speak briefly, in the first instance, of what may be termed the premonitory cholera of December.

On the 25th of November, 1848, the Asiatic Cholera, not having up to that moment shown itself epidemically, during the recent invasion, at any point west of the British Islands, sprang at a bound over 50 decrees of longitude, and swooped down upon the packet ship New-York, in the latitude of Nova Scotia. The ship was loaded with French and German emigrants, but neither at the port of embarkation, Havre, nor at

* The number of deaths in each ward, as given on the map, is not the result of actual returns, but of an estimate based upon the total number of cholera deaths in the city, as reported to the city inspector, and allotted to the different wards in proportion to the number of cases, furnished by each ward to the cholera hospitals. It is, therefore, only an approximation to the *absolute* mortality, and probably falls considerably below the real amount. The *relative* mortality is probably not far from correct.

any place whence the emigrants proceeded, was the Asiatic Cholera prevailing.

On the 2d December the ship arrived at Staten Island, the cholera still prevailing among the emigrant passengers in the steerage. The cabin passengers, it is believed, to a man escaped. She was placed in Quarantine. The steerage passengers were removed on shore and placed in the public stores on the dock. They were to a certain extent isolated. Numbers, however, broke their quarantine and escaped to the city. In a crowded and filthy German boarding-house, in the lower part of Greenwich-street, two fatal cases occurred. The place was immediately cleaned out and purified. The occupants said to have been two hundred in number, were scattered over the city. In a German boarding-house of a more respectable character in Washington-street, one fatal case of cholera occurred not traceable by any known medium of connection to the emigrants of the packet ship New-York. One individual, supposed to be one of the emigrants, or at least to have had communication with them, went by some means to a building on the upper part of the island, some miles from town, occupied as a convalescent hospital for typhus patients. He died in this building laboring under the usual symptoms of Asiatic Cholera. It was not communicated to the other inmates. This, it is believed, terminated the first brief chapter in the cholera of 1848. It was the distant muttering that precedes the tempest. The hour of its full development had not arrived.

Immediately on the occurrence of the circumstances above mentioned, the board of health were convened. Suitable sanitary measures were adopted, a building for a hospital was provided, but never occupied. After a short period, the alarm and excitement subsided.

Almost simultaneously with the outbreak on board the packet ship New-York, an emigrant vessel arrived at the port of New-Orleans, with cholera on board. It found there an atmosphere apparently suited to its development, for it spread rapidly over the city. During the entire winter it continued to prevail, and on the opening of spring extended ra-

pidly up the Mississippi and Ohio Rivers, spreading every where its desolating ravages. It did not, however cross the Alleghanies, although it visited almost every portion of the great Mississippi valley.

In another portion of this paper, the facts connected with the introduction of it to New-York, by the packet ship New-York, and its introduction into New-Orleans by an emigrant ship, will be made the subject of some remarks, as to their bearing upon the mode in which cholera is propagated. We pass now to our more immediate subject.

On the 11th day of May, 1849, Dr. Harriott, physician of the N. Y. Dispensary was called to visit certain cases of disease, at No. 20 Orange-street, in the 6th Ward, and in the immediate vicinity of the "Five Points." At his first visit the cases were two in number. Others were soon added and proved rapidly fatal. The extreme severity and fatality of the cases aroused his suspicions, and on the 14th, he very properly communicated to the authorities what had taken place. On the 15th, the board of health were convened, and on the 16th the writer received orders from the board to visit the premises, at the rear of No. 20 Orange-street, and report what he there found.

This place, having been so to speak, the birth-place and natal soil of the recent epidemic, is perhaps deserving of a moment's notice. It will be found no matter of surprise, that here cholera selected its first victims. A more befitting birth-place could hardly be found within the limits of this or any other city.

No. 20 Orange-street lies about 30 or 40 yards in a south-easterly direction from the "Five Points." The entrance to the rear lot is gained by an opening scarcely two feet in width, or more than 6 feet in height, pierced through the front house. Passing through this a distance of 40 feet, you reach the rear lot, on which are two old and ruinous wooden tenements. One a prolongation backwards of the front house, the other standing across it and at right angles. The adjoining house has an extension backwards in the same manner, thus cutting

off almost completely all ventilation or admission of fresh air. The small area left unbuilt uopn is covered with black pools of filthy water.

The apartment where the first cases occurred is a basement or cellar in one of these rear buildings, sunk entirely below the ground-level. The room is about 10 or 12 feet square. The door had fallen from the hinges. The sashes of one or two small windows were without glass. There was not in the room, bed, chair, or table, or a single moveable, except two empty barrels. The door removed from its hinges, and laid across, formed the only substitute for a table. At my first visit, on the 16th May, five human beings one man and four women, lay upon the floor, in different stages of cholera. There was nothing under them but mud and filth, and nothing over them, but a few rags of the filthiest condition. It is not easy to conceive of human beings reduced to a more abject condition. Civilization and a great city could only afford a parallel to this scene. They were lower than savages, because the latter would, at least, have the sky above them, and the pure air of heaven to breathe. They were actually lower than brutes.

These people constituted the second crop of cases. Those first attacked had died previously. Their death had been observed by a "wake," and extensive potations of villanous whiskey. The orgies were kept up during the whole night, and all those now sick, with a number of others, were assisting at this "wake." Indeed, the subsequent cases, for two or three days were mainly those who were at the "wake."

On the morning of the 17th, two of the five mentioned died. The survivors, together with some new cases, in all seven, were removed to a temporary receptacle at 127 Anthony-street. Four of the seven died before the 18th. Those who survived, with some others, were transferred on the 18th to the building afterwards known as Centre-street Hospital.

On the 19th, no new cases were admitted. On the morning of Sunday the 20th, two women were brought to the hospital from the "Old Brewery," situate about 100 yards

west of 20 Orange-street. Both were laboring under the strongly-marked symptoms of the most malignant Asiatic Cholera. Both died in 3 or 4 hours after admission.

On the 21st and 22d, five cases were brought in, all originating within one hundred yards of the old locality. On the 23d, no new cases. Previous to the 24th, it is not known that any cases had originated at any place distant more than 100 yards from the original locality. In 14 days from the commencement, the pestilence had not extended itself beyond this distance, nor had it numbered more than about 20 victims. All of these, with two or three exceptions, were females of the lowest and most abandoned character, living in beastly filth and intemperance. It is worthy of remark, that during the whole of this period, the temperature was cool, and a fire was necessary for the comfort of the patients and their attendants.

On the 24th, a patient was brought in, found at the corner of Stanton and Clinton streets, in the 17th Ward, probably a mile, in a N. E. direction from the original locality. During the subsequent week, ending with the 31st May, the cases were still mostly confined to the old neighborhood. On the 31st, one patient was brought from Thames-street, half a mile in a south-westerly direction.

During the first seven days of June the weather became warm, and the disease spread rapidly in all directions. Within this period 70 cases were received into the hospital, being double the whole number admitted during the whole previous time the hospital had been open. It had shown itself in the 1st, 2d, 3d, 4th, 5th, 6th, 7th, 8th, 9th, and 14th wards at least, and perhaps in others. The number of patients admitted to Centre-street hospital was quite beyond its limited capacities, and it was crowded to a most uncomfortable and dangerous extent. The mortality during this period was greatly increased by this overcrowded condition, as is evident from the official report to the Board of Health. Subsequently, by the opening of William-street Hospital and of additional apartments in Centre-street Hospital, the per centage of deaths was greatly reduced.

At the end of the first week in June, or about twenty-eight days from the appearance of the first case, the pestilence had become pretty extensively and generally diffused over the city. At the end of the third week in July, or about seventy-two days from its first appearance, it had arrived at its "culminating point." Its increase was very gradual, uniform and progressive. Its decline was of a similar character, but more rapid than its increase. The maximum of weekly mortality in the city, viz., 1409 deaths, was reached on the 21st July, 72 days from the appearance of the first case. On the 29th September, 60 days from the period of greatest mortality, 132 days from the first case, it had fallen back to the mortality at the commencement.

There were in the city a number of particular localities, in which the pestilence raged with extraordinary malignity. These were in the neighborhood of the "Five Points," the lower part of Washington-street, in the first ward, the streets and avenues in the sixteenth ward lying near the North river, and in the northeastern section of the city, in the 7th, 10th, 11th and 13th wards. This unusual malignity was produced in part by local causes, and in part by the character of the population. In the 6th ward, occupied to a considerable extent by a filthy, degraded and vicious population, and in which abound places similar in character to that described at the commencement of this paper, it can be no matter of surprise that the pestilence devoured hecatombs of victims. The section of the first ward where it raged most severely, was crowded with newly arrived German emigrants, living in habits of personal and domestic filth, and fed upon insufficient and unwholesome diet.

In the 16th ward, the population was less crowded, but there were in operation local causes which sufficiently explain the mortality. Pits and pools of stagnant water abound. Numerous horse-killing and bone-boiling establishments send forth their putrid miasmata. These, with glue, starch and soap manufactories, produce a combination of villanous and disgusting odors, without a parallel. It is true that some of

these horrible nuisances were for a time suppressed, but not until the pestilence had swept over the entire neighborhood with the besom of destruction.

In the north-eastern section of the city, it is not known that any special local causes existed, but the population was largely composed of German and other emigrants, whose habits of life, nature of diet, &c., eminently dispose them to become the victims of an epidemic.

Those portions of the city occupied by wide and airy streets, and inhabited by a population whose circumstances and habits of life, by reason of diet, ventilation and cleanliness, are favorable to health, enjoyed almost a complete exemption from the ravages of the pestilence. The map accompanying this paper exhibits with sufficient clearness the degrees of mortality from the deep black of the 6th and 16th wards, up to the almost white of the 3d and 15th wards.

The city of New-York has now passed through its third visitation of Asiatic Cholera. The years 1832, '34 and '49, but more especially the first and the last, will be memorable in its future annals as years of pestilence. During the intervening period between 1832 and 1849, some important changes occurred, which exercised in a certain degree a modifying influence upon the character and intensity of the pestilence. The population had, it is true, greatly increased, but the distribution of the population was changed. A large transfer from the lower to the upper wards had taken place. By reason of the greater width of streets, and size of the blocks and squares of the newer portion of the city, it is probable that the aggregate density of the population had been on the whole diminished.

The introduction of the Croton water exercised an important and most salutary influence upon the pestilence. This it did not only by furnishing an unlimited supply of excellent water for all the purposes of public and private cleanliness, but also by supplying for drinking purposes a liquid comparatively pure and free from foreign admixture. That

saline fluid furnished by wells and pumps, and by the Manhattan Company, under the name of pure and wholesome water, before the introduction of the Croton, must have had a powerful agency in predisposing to affections of the stomach and bowels.

By whatever causes produced, the intensity of the epidemic influence seems to have been somewhat more dilute in one respect in 1849 than in 1832. It rushed with far less rapidity to its maximum mortality in '49 than it did in '32. In the first epidemic it required but about 21 days to reach this height, in the last, as we have seen, 72 days were occupied. It is worthy of notice, however, that the date of the greatest mortality is about identical in both years, viz: the 21st July, or about the middle of summer.

With regard to the whole number of cases of *bona fide* Asiatic Cholera which occurred during the epidemic, we have no means whatever, beyond simple conjecture, of determining. Very early in its progress, it became evident that but a very small proportion of the cases occurring were reported by the attending physicians. Whether deterred by reluctance on the part of friends, or by indolence or want of time, or by whatever cause on the part of the practitioner, the weekly reports of the city inspector, demonstrated conclusively that but few of all the cases were reported. The startling discrepancy between the weekly report of deaths and the totality of cases reported by attending physicians, induced the city authorities to resort to very stringent measures to obtain fuller reports. The success of these measures was, however, but very partial.

We are, consequently, driven to the inspector's reports of interments as the only criterion by which to estimate the amount of cholera. Even here, there is an obvious fallacy. The total mortality by cholera asphyxia during the epidemic period is set down at 5017, but the excess of mortality over the corresponding period of the previous year, which was probably about an average season, is 8827, allowing some-

thing for the increase of population, it is a fair inference, that at least 8000 of the excess of mortality is fairly to be set down as the result of the epidemic influence. Upon a fair estimate of the ordinary ratio of mortality in cholera, there could not have been less than from 18,000 to 20,000 cases of cholera, or one case to about every 250 of the population, and one death to about every 500. That this sickness and mortality fell principally upon the emigrant and floating population, and upon the lowest and most vicious of the resident population, is evident from a fact stated publicly from the pulpit by a clergyman connected with three very extensive religious congregations, three of perhaps the largest in the city, viz.: that the severe sickness and mortality in the congregations had not been increased by the epidemic. That there were, it is true, more persons complaining of slight indisposition, and conscious in their own sensations of the epidemic influence; but by careful attention to diet and other prophylactic measures, the result was as stated.

With regard to the temperature and other meteorological phenomena of the season, there is nothing striking to be observed. It was about a fair average season. The month of May was wet and damp, the prevailing wind N. E., and 3.77 inches of rain fell. The months of June and July were dry with but 0.79 inches of rain in each. The prevailing winds S. E. and S. W. During August there were heavy rains. During July and August there was less than the usual amount of thunder and thunder showers. Some were disposed to ascribe to this fact an important influence upon the epidemic, and certain sage theories of ætiology and therapeutics were attempted to be raised upon this hypothesis. When submitted, however, to the test of experiment, the foundation was found too feeble to sustain the superstructure, and both fell to the ground together. Ozone and sulphur had their day for a short period, but both were soon forgotten, or remembered only to provoke a smile.

When the Centre-street Hospital was first opened, it was our wish to keep an accurate record of the thermometer, baro-

meter and hygrometer, throughout the epidemic. By our request, the necessary instruments were obligingly furnished by the Sanitary Committee, and a daily record was commenced. Such, however, was the urgency of more pressing duties in attending to the sick and dying, and so great the demands upon our time and strength, that the design was but imperfectly carried out. By a comparison, however, with the accurate record kept by Mr. Dacy, Apothecary to the N. Y. Hospital, we have been enabled to correct our more imperfect record.

The following table exhibits the weekly mortality from Asiatic Cholera, and all other diseases of the stomach and bowels, with the mean morning temperature of each week during the epidemic.

Week Ending	Deaths by Cholera Asphyxia.	By other diseases of the bowels	Total by all bowel diseases.	Mean m orn'g temperature.
May 19,	1	28	29	55
" 26,	13	24	37	61
June 2,	29	40	69	59
" 9,	121	60	181	65
" 16,	145	38	183	65
" 23,	152	59	211	78
" 30,	286	103	389	74
July 7,	317	98	415	63
" 14,	484	196	680	78
" 21,	714	297	1011	71
" 28,	692	278	970	73
Aug. 4,	678	266	944	71
" 11,	423	260	683	75
" 18,	387	265	652	71
" 25,	233	228	461	72
Sept. 1,	171	204	375	74
" 8,	94	145	239	66
" 15,	36	124	160	62
" 22,	21	107	128	65
" 29,	11	94	105	60
Oct. 6,	6	73	79	55
" 13,	3	60	63	50

Upon an inspection of this table, it will be observed, that at the commencement of the epidemic in May, the mean temperature was at 55, that up to the week ending 2d June, it had only risen to 59. During this period the progress of the epidemic was very slow. The total mortality by cholera this week was but 29. The week ending June 23d had a mean temperature of 78, and the mortality by cholera that week had risen to 152. This was the morning temperature, the mean mid-day temperature was not less than 80, and during the height of the epidemic was about the average temperature. When the mean temperature fell down to 55, which was that of the week when it commenced, the cholera had nearly disappeared.

It has been remarked that, in some places where cholera prevails it swallows up all other diseases, or that all other diseases assume its livery. It was not so in New-York during the recent epidemic. Dysentery prevailed during the whole period. It increased nearly *pari passu* with the cholera up to a certain period, but after cholera began to decline there was an increase of mortality by dysentery. The total deaths by this disease during the epidemic were 949, between 3or 4 times as many as during the corresponding period of the previous season.

Cholera infantum destroyed 901 against 492 in the corresponding period of the previous year.

CHOLERA IN THE PUBLIC INSTITUTIONS.

Five cholera hospitals were opened in different portions of the city, as the exigencies of the pestilence from time to time required them. The aggregate of patients in all was 1901. The aggregate of deaths 1021 or 53·71 per cent. The statistics of these institutions have been fully detailed in the Report of the Sanitary Committee, already published, but as there are doubtless many readers of this Journal, into whose hands the Report will not fall, it is deemed proper to give a brief abstract of the reports of each of the hospitals.

Centre-street Hospital was opened on the 18th May.

During the first 30 days, the patients were all confined to a single apartment. During a portion of the time, this apartment was uncomfortably and most dangerously crowded. It admitted no classification or separation of patients whatever. Males and females lay side by side, and in full sight of each other passed through all the operations of the sick room. Patients in the first stage of the disease, and convalescents were face to face with those in the agonies of dissolution. They were compelled to witness their dying sufferings and listen to their shrieks and groans. When they were dead they were obliged to see them coffined and hear the nails driven home.

The moral influence of such a state of things could not be otherwise than disastrous upon the patients. While themselves suffering intensely, they paid little attention to the suffering of others. It was when they had passed the crisis, and began to recover a little, that these fearful scenes were most acutely felt.

After a time it became unendurable. After the most earnest solicitation, authority was at last obtained to seize upon and open other portions of the building. The report of Centre-street Hospital was therefore presented in two periods. During the first all the patients were confined to a single room. During the second we had four wards, two for patients in the first stage—two for convalescents. The difference in the results is striking.

First period commencing 17*th May, ending* 16*th June*—30 *days.*

Admissions, 159.
Deaths, 97 or 61·9 per cent.
Cures, 62 or 38·1 "

Second period, commencing June 17*th, ending Aug. 5th*—52 *days.*

Admissions, 310.
Deaths, 146 or 47·1 per cent.
Cures, 164 or 52·9 "

Showing a difference of 15 per cent. in favor of the second

period. Treatment the same. The per centage of mortality in collapse was—first period, 82·4 per cent.; second period, 65·6 per cent.

The building known as Centre-street Hospital was a porter-house or tavern. The four other cholera hospitals were public schools, spacious, airy and well ventilated. They could not have been better calculated for hospitals had they been built for the purpose.

WILLIAM-STREET HOSPITAL, under the care of Dr. Vache, was opened on the 9th of June, and closed on the 27th August.

Whole number of patients, 712.

Died,	408, or 57·30 per cent.
Recovered,	304, or 42·70 "

514 had previous diarrhœa.

THIRTEENTH-STREET HOSPITAL, under the care of Dr. O. P. Wells, opened 15th July, closed 11th September.

Whole number of patients, 275.

Died,	139, or 50·54 per cent.
Recovered,	136, or 49·46 "

STANTON-STREET HOSPITAL, under the charge of Dr. Isaac Greene.

Whole number of patients admitted, 224.

Died, 112 or 50 per cent.

Cured, 112 or 50 "

THIRTY-FIFTH-STREET HOSPITAL. under the charge of Dr. Wm. P. Buel. Opened July 29th, closed Aug. 30th.

Whole number admitted, 119.

Died,	65, or 54·62 per cent.
Recovered,	54, or 45·38 "

More full and complete details of these hospitals will be found in the Report of the Sanitary Committee.

In the City Hospital.

With an average resident population of about 250 persons, including patients and attendants, only two cases of cholera fairly originated in the house. Including these, and 10 other cases laboring under premonitory symptoms when brought in, twelve cases were under treatment, of whom 8 died and 4 recovered.

The diet of the house was not materially changed during the epidemic. It consisted (the full diet) of fresh beef and beef soup, potatoes and wheaten bread. Where any tendency to diarrhœa existed, rice was substituted for potatoes. The nurses in every ward were furnished with opiate powders, which were administered on the first occurrence of diarrhœa, to this regulation chiefly the small amount of cholera is to be ascribed. For these facts I am indebted to the intelligent house surgeon, Dr. J. K. Merritt.

In the City Prison or "Tombs."

We are informed by Dr. Covel, the physician to the prison, that there was actually no cholera originating in the prison.

The average number of inmates during the epidemic was 250. The average number of weekly committals something more than that. The diet consisted chiefly of beef and beef soup, boiled rice, wheat bread and coffee. The prison was fumigated several times a week with the fumes of roasted coffee. Sulphur fumigations were also used. To these fumigations, together with extraordinary attention to cleanliness, Dr. C. ascribes this certainly remarkable exemption. Opiates and astringent preparations, were kept always at hand, and administered on the first occurrence of diarrhœa. Both these institutions are situated in the lower third of the city; and though in this portion of the city the cholera originated, it suffered less from the epidemic influence than many of the upper portions.

In the Bellevue Hospital.

This institution, situated between Twenty-fifth and Twenty-

eighth street, immediately upon the East River, had during the epidemic an average resident population of 477. Considering that these were mostly paupers, many with enfeebled constitutions, the amount of cholera and of mortality was very small. 37 cases occurred, of which 29 proved fatal.

In the House of Refuge.

This institution situate immediately adjoining the Bellevue Hospital and also upon the East River, had on an average 450 boys and girls in confinement during the season. The high wall, with which it is surrounded, interferes to some extent with ventilation. It felt strongly the epidemic influence. Nearly all the inmates, as we are informed by Dr. Carter, suffered from diarrhœa. At least 200 had the rice-water evacuations. By prompt attention to first symptoms, only 3 cases terminated fatally.

In the Institution for the Blind.

Situated between Thirtieth and Thirty-third street, one or two squares from the North River. This institution suffered most severely. It has an open, airy, elevated position, surrounded by spacious streets and avenues, but it forms a portion of the 16th ward, where from the action of local or endemic causes, the epidemic influence operated with intense energy. With about 120 inmates, there were 44 cases of cholera, of which 9 or 10 were fatal, and this with all possible prophylactic measures. We are informed by Dr. Bliss, who had the medical charge of the institution, that but for the timely precaution of removing all the inmates into the country, he believed the greater portion of them would have perished.

The Pauper Lunatic Asylum on Blackwell's Island.

With an average population of 400 inmates, there were 148 cases of cholera and 91 deaths. This institution is at all times over-crowded, and among so large a number of lunatics, it is, of course, more than usually difficult, to ascertain and prescribe for first symptoms

With regard to the other public institutions on Blackwell's Island, viz.: the Alms House, Penitentiary, and Penitentiary Hospital, we have attempted, but without success, to obtain the cholera statistics. No reports from these institutions have been published, and the public know nothing beyond the fact, that there were in them a great amount of cholera and an extensive mortality. The same remarks apply also to the nurseries for Pauper Children at Randall's Island, to the Emigrant establishments on Ward's Island, and to the Colored Home.

Character and Description of the Disease.

The Asiatic Cholera, the most formidable and fatal pestilence the world has known, within the limits of authentic history, has become a familiar object to physicians in almost every quarter of the globe. Its nature and history have been carefully studied and most thoroughly examined. Its habitudes and haunts, the phenomena to which it gives rise during life, and the traces it leaves behind after death, have been minutely described. Each recurring epidemic, however, possesses at least a local interest, and as forming a chapter in the great volume of epidemic diseases, deserves a careful examination. Should it present any new symptoms, or even modifications of symptoms, these should be carefully noted.

It is not believed that this was true of the recent epidemic in New-York. A correct description of Asiatic Cholera, as it occurred in the British Islands, or in Continental Europe, or in other parts of this continent, would be equally applicable to the recent epidemic here. Those who witnessed the cholera in this city in 1832 and 1834, will, it is believed, be pretty unanimous in the opinion that the cholera of 1849 presented no essential points of difference. During the earliest stages of the epidemic, it is true that there were not wanting those who questioned its identity with Asiatic Cholera, or at least imagined that it existed in a modified and milder form. Long before its close, it is believed the most skeptical ceased to entertain any doubts. The well-known diagnostic symptoms

of Asiatic Cholera were fully and thoroughly developed. The vomiting and purging of rice-color fluid, the spasmodic muscular action, hoarse whispering voice, cyanosis, asphyxia and suppression of the secretions, which marked the great majority of cases, pronounced in unmistakable language, the character of the disease.

To the general suppression of the secretions, there is one exception we do not recollect to have seen noticed, and which attracted our attention frequently during the epidemic. The secretion of the mammary glands continued, while the urinary and biliary secretions were entirely suppressed. In very many instances, mothers in the process of lactation were brought to the hospital with their infants, and continued to give them nourishment. In one instance, where the infant was not brought, a mammary abscess was the consequence. Thus, by a remarkable provision of nature, while those secretions which regard simply the well-being of the individual were suppressed, that which looks to the preservation of the species was continued.

With this single exception, we find it unnecessary to add anything to the oft-repeated descriptions of Asiatic Cholera.

Treatment and its Results.

Asiatic Cholera, like most other diseases characterized by great obstinacy and great malignity, has had recommended for its cure, almost an infinite variety of remedies. The nearer any disease approaches to absolute incurability, the greater number, usually, of vaunted and infallible panaceas. In its different stages, cholera is at once a very curable and a very incurable disease. The stage of collapse forms one of its most significant and characteristic features. The *Asphyxia*,* or pulselessness which accompanies this stage, has

* The true meaning of this word is often mistaken, even by scientific writers. See McIntosh on Theory and Practice, Chap. on Asiatic Cholera. See also a communication to the Belgian Acad. of Medicine, by Dr. Raikem, quoted in the October number of the American Journal of the Med. Sciences, in which it is said to be synonymous with Paralysis of the Lungs. Asphyxia (*a, priv., σφυξ pulse,*) means simply pulseless, or without pulse. In this sense only, is it appropriate to Asiatic Cholera.

given to the disease one of its most significant specific names. Collapse ought, in reality, to be considered a sequence of the disease, and not the disease itself, just in the same manner as the exactly opposite condition of œdema, or cellular dropsy, is a sequence of scarlatina, and not that disease itself. Practitioners have, perhaps, had their attention too much directed to the frightful picture presented by a cholera patient in collapse, and have directed their remedies and plan of treatment accordingly. Conceiving that they had a giant malady to grapple with, they have felt compelled to resort to gigantic remedies and heroic treatment.

It is difficult to conceive of any rational principle of therapeutics, or indeed any principle, but the one just alluded to, upon which could be predicated the treatment of collapsed cases of cholera, with large doses of calomel. Yet this treatment, especially during the early part of the epidemic, had many warm advocates. In one of the cholera hospitals, it is understood that it was extensively adopted. Indeed it is on record, in the hospital register, that thirty, forty, fifty, sixty and even one hundred grains of calomel were administered to patients in the collapse stage, and this not for a single time, but oftentimes repeated. It affords a striking practical commentary upon the success of this treatment, that in the official report of that hospital, we are informed that 93.20 per cent. of all the collapsed cases perished.

There can be no question but that the great majority of cases of confirmed collapse will die under any mode of treatment. It is only in those organisms possessed by nature with extraordinary recuperative energies, unbroken by intemperance or excess, unimpaired by age, previous disease, or any other debilitating cause, that a different result can be reasonably expected.

It appears to us that the asphyxia which follows the profuse serous diarrhœa of Asiatic Cholera, should be treated on analogous principles with the asphyxia from submersion, strangulation, or profuse hemorrhage. Under these circumstances, would any sane man dream of administering

large doses of calomel? Externally, warmth, frictions, counter-irritants; internally, gentle stimulants, warm nourishing drinks, anodynes in moderate doses, to allay spasm and irritation; these are the remedies which reason suggests and experience confirms.

The serous diarrhœa, which accompanies nine out of ten cases if not a still larger proportion, of cholera, and which really constitutes its essential feature, requires the same treatment as other forms of diarrhœa. Of all single remedies, opium stands first. Next perhaps is camphor. Aromatics and astringents are useful adjuvants. Calomel in combination, in small doses, assists in restoring healthy secretions.*

Consecutive symptoms, sometimes febrile, sometimes not so, frequently are consequent upon partial or confirmed collapse. Accompanied with cerebral, pulmonary or hepatic congestions; with a depraved and abnormal condition of the blood from the loss of serum and the presence of urea, excess of carbon, &c., they present, often, a most formidable complication.

Diluent drinks, counter-irritants, small doses of calomel, together with diuretic remedies, form an appropriate treatment. The sesquichloride of iron, from its known diuretic properties, proved very useful in this stage of the disease.

The experience of the present epidemic has added strong confirmation to the doctrine, before pretty well established, that cholera, while in the stage of serous diarrhœa, is in healthy constitutions, a very controllable affair; and that when it has passed to the stage of collapse, a mischief has been accomplished, which in the vast majority of cases, is irreparable.

The Question of Contagion.

What bearing have the facts connected with the recent epi-

* The treatment of which the outline is here given, is understood to have been the treatment adopted for the most part in the hospitals, and by the majority of private practitioners. One of the hospitals in which the plan of large doses of calomel without opium was tried on a very extensive scale, reports the largest per centage of mortality; a mortality reaching, in collapse cases, 93.20 per cent.

demic upon this question? We have seen that in December last, a vessel, with cholera on board, arrives at the port of New-York. The passengers being landed at the Quarantine, cholera continues to prevail. Numbers of the passengers break their quarantine and escape to the city. Two of those passengers die in the city with cholera—one in a crowded German lodging-house—one in convalescent fever hospital in the suburbs. Two other fatal cases of cholera occurred. Immediately thereupon a sharp frost occurred, and there was no more cholera in the city for months.

Nearly at the same moment, a vessel arrived at the port of New-Orleans with cholera on board. Almost simultaneously cholera manifested itself in various parts of the city of New-Orleans. The weather was at that time summer-like—it is described as being hot, sultry, and "muggy." The cholera prevailed extensively and with great fatality, until cold weather supervened. Indeed, it is understood to have continued more or less through the entire winter. On the opening of spring it showed itself extensively over the valleys of the Mississippi and Ohio rivers.

The principal point of difference between these two groups of facts, is that in New-Orleans a summer temperature was prevailing, in New-York, though mild, the temperature was that of winter. The other facts are nearly identical. Can any one inform us why, if cholera is susceptible of being propagated by simple contagion or personal communicability, it did not spread over New-York as it did over New-Orleans?

Again, on the 11th May, 1849, genuine Asiatic cholera manifested itself at No. 20 Orange-street, on the "Five Points." All the individuals who were seized had been living on the premises for weeks. This was ascertained by the most careful inquiry. They had held no communication mediately or immediately, except as the atmosphere forms a common medium for all who inhale it, with any other cases of cholera. During the month of May, the weather remaining cool, a few cases continued to occur in filthy and unhealthy localities. The first week of

June, the weather became warm, and cholera broke out in every quarter of the city.

What bearing has the experience of the cholera hospitals upon the question of contagion? Quite a number of the nurses and attendants in the Centre and Thirty-fifth-street Hospitals were seized with cholera. But in no instance did this occur without a strong exciting cause, either gross intoxication or gross errors in diet. It is worthy of remark also, that the hospital was open 19 or 20 days before the first nurse or attendant sickened. If cholera is contagious, how long is the period of incubation?

Another striking fact. In very many instances, females with nursing infants were brought to the hospitals. The children continued to suckle sometimes almost till the mothers died. It is not known that in any instance the child contracted cholera.

Among all the physicians attached to cholera hospitals, and other public institutions where cholera prevailed extensively, not less than forty or fifty in number, there was not a fatal case of cholera, and indeed we cannot learn that more than two of the whole, had cholera at all.

In the Centre and Thirty-fifth street hospitals, there were, at different times eight or nine medical attendants. Several of these passed their whole time, day and night, eating and sleeping in the hospitals, not one had the cholera.

The writer, upon a careful examination of the facts as they appear to him, does not regard any of them as favoring the doctrine of contagion or personal communicability. He is however perfectly aware that different minds arrive at very different conclusions, from the contemplation of precisely the same facts, and that some of our most intelligent physicians are still contagionists.

Post-Mortem Appearances.

Cholera is a disease which runs its course too rapidly to leave very strongly-marked traces behind. The most obvious general remark is, that the blood had abandoned the periphery and rushed towards the centre. To furnish that

deluge of serum, which was exhaled from the mucous surface of the intestinal canal, it is obvious that an abundant supply of the fluid, at whose expense it was furnished, must be at hand. Accordingly, on laying open the abdominal cavity, the phenomena first presenting itself, is the engorged, crowded condition of all the blood-vessels, ramifying over the intestinal canal, throughout its whole extent. The entire absence of fluid in the peritoneal cavity, and the sticky, gummy, almost dry feel of the peritoneal surface, is in this connection a striking circumstance.

When the mucous surface of the intestine is exposed to view, it presents the same aspect of sanguineous enjoyment. Ecchymoses and bloody discolorations are scattered extensively over its surface. The small glandular bodies, whether solitary or in groups, which are scattered over the mucous surface, are enlarged and hypertrophied.

The liver and spleen present frequently though not uniformly the marks of engorgement. The gall bladder was in the large majority of cases found distended.

In the serous membranes of the thoracic cavity, the same remarkable dryness is found.

In those who died in the consecutive fever, the brain and spinal marrow presented usually strong marks of venous congestion. The lungs, liver and larger viscera, bore marks of engorgement.

The changes which have been produced in the solids of the body are comparatively unimportant. In many rapid cases of cholera, it would be difficult simply from an inspection of the solid organs to form even a conjecture as to the cause of death. It is the transformation which has occurred in the vital fluid, the thick black, tar-like consistence of the blood, which affords the true key to the phenomena of cholera—circulation, secretion, calorification, life itself, have become impossible. "IN THE BLOOD IS THE LIFE THEREOF." When we can restore to the system its vital fluid, then and only then can we restore life and health to the COLLAPSE of cholera.

ART. II.—*An Eclectic Essay on the Non-Pediculated Fibro-Scirrhous, Fibro-Cartilaginous, and Fibro-Calcareous Tumor of the Uterus.* By WM. C. ROBERTS, M. D., F. C. P. and S. of N. Y., Secretary of the New-York Pathological Society, and formerly one of the Physicians of the Northern Dispensary.

[Continued from vol. 3, page 245.]

THE *prognosis* of this affection, is, according to Blundell, favorable upon the whole, "for though it rarely happens that women are cured of this disease, it is not, I think, often that it speedily destroys life; so far, therefore, the prognosis may be deemed very favorable, compared with that of many other diseases of disorganization." Mayo remarks that they are not malignant, and have no disposition to lead to similar diseases in other organs, or to ulcerate; but Churchill, while he admits the general correctness of this rule, "has known in a very few instances, inflammation to occur in the coverings of the tumor, and superficial erosions and ulcerations to take place." He also states that the investing membrane has occasionally been attacked by inflammation, without the participation of the new structure. The opinions of others are, as to their non-malignity, not so encouraging. "My own conviction is," says Ashwell, "that without treatment, these changes would have proceeded on to ulceration, and left the patients without hope of recovery. I saw them gradually getting worse, slowly softening, until their surfaces were broken and ulceration occurred, with constant irritation, fœtid and sanious discharges, and occasional hemorrhages, which, sooner or later caused a fatal result, particularly those of the cervix and os. In some, they attain a certain size and induration and are afterwards quite stationary, occasioning only weight and the mechanical effects of pressure, and neither the moderate enjoyment, nor the usual duration of life has been much, if at all curtailed. In others, frequently, a period arrives at which their growth and the result of it are suddenly so conspicuous and decisive, as to demand prompt and efficient relief." "That all tumors," says Davis,

"are not exempt from the liability of becoming malignant at an advanced period of their existence, there can be no doubt, while probably there may have existed few varieties of malignancy, or of morbid character of tissue, in which tumors of this class have not been known to terminate." He mentions, in confirmation of this view, the case of a woman aged twenty-eight years, who had carried her tumor for eight years. Fifteen months before her death, her health began to suffer, and she died cachectic, with sanious discharges. There was found imbedded within the structure of a large sarcoma of this kind, several other tumors of a smaller size, decidedly carcinomatous. Blandin remarks, that "they suffer occasionally, though formed of a tissue very different from scirrhus, cancerous degeneration; at least, we have seen several undergoing considerable softening, and reduced internally to a pap analogous to that of certain carcinomatous tumors." It is strange that an author so justly esteemed, and so well informed as Mr. Burns, should say that "the effects of this disease are chiefly mechanical, and often altogether trifling, and occurring by itself, seldom directly dangerous or hurtful, except by mechanical or sympathetic irritation. I have known it exist many years without injury either to the health or complexion. I have *never* seen the tubercle end in suppuration, nor the substance of the uterus, although thickened, have abscess formed in it, and this observation is confirmed by other practical writers, who state that it tends, not to suppuration, but to ossification." The same error is committed by Waller, who says, "the tumor neither suppurates nor ulcerates."—p. 72. Davis says that the irritation and mechanical effects produced by them, viz., encroachment on the parts within the pelvis, may of themselves prove fatal. Bayle observes, that though they do not become dangerous of themselves, they may bring with them a train of serious evils: irregularity or suppression of the menstrual function;* sterility, when situated in the walls

* To this we may add retention of the catamenia, from obstruction of the cervix or os uteri, and frequent hæmorrhages, occasionally fatal. (Boivin, Ashwell, Ingleby, *et post.*)

of the uterus, from closure of the tubes; the production of hemorrhages, (sometimes fatal,) compression of the bladder and rectum, and disturbance of the progress of pregnancy. Upon this latter point, all authors are agreed. Boivin and Dugès state that it may occur in three ways. First, by preventing the progressive development of the uterus, and causing abortion; second, by impeding delivery; and thirdly, by preventing the due contractions of the uterus after it, and causing a fatal hemorrhage. Nothing is more common than the first of these events. Roemer states that Rousset, (Ac. de Med., Janv. 19th, 1829,) saw it occur at six weeks; Boehmer (Obs. Anat. Var. Fasc. alter. 1756, p. 131,) at the second month; Sandifort (Obs. on Path. lib. 1. ch. 8.) at six months; and Meckel (Path. Anat. II. 2, p. 249) at eight months. "Patients becoming pregnant," says Ashwell, "are exposed to imminent danger. The tumor softens during the latter months; the increased vascular supply tends to inflammation; unhealthy and imperfect suppuration is established in them, and death occurs soon after parturition." The manner in which this softening occurs, is best described by Hodgkin. "The breaking down of such tumors," says he, "has been ascribed to ulceration; but it is a greatly different process. It consists in the absolute death of a part of the tumor, which loses its color, and becomes of a pale, and often of a yellowish or green tinge. It then softens, probably from a new arrangement of its own constituents; but this effect is considerably increased by the dead part of the tumor now becoming a source of irritation, and consequently occasioning an increase in the quantity of blood, both in parts of the tumor retaining vitality, and in the neighboring natural structure. Then inflammation, and sometimes ulceration ensues, but the more common and remarkable result seems to be the death of further portions of the adventitious structure, the softening of which is promoted by the increased afflux of blood." "The fibrous tumor may terminate in acute inflammation, and discharge of a white mucous, purulent, or grumous nature. Softening of a tumor is gene-

rally, but not necessarily the result of pregnancy, and may, or may not proceed to suppuration. It may pervade a part only of, or the entire mass, and extend to the cellular tissue adjacent, in which, and not in the tumor, the pus may form, and be discharged per vaginam, with great diminution of the tumor. Of this, Dance *(Mem. sur la Phleb. Uterine)* relates a case: a fibrous tumor in the centre of an abscess in the walls of the womb. The grumous discharge has very much the color and consistence of chocolate; is inodorous, does not coagulate, and seems to consist partly of venous blood and partly of a portion of the tumor itself, in a state of pulp or solution. The discharge comes away so gradually, that several weeks may elapse during its continuance; and the subsidence, if not the disappearance of the tumor, may with much confidence be anticipated. Such tumors may discharge through the rectum, bladder, vagina, or abdominal parietes." I cannot tell exactly when the observations here cited from Dr. Ingleby, and those which follow in his work, on the effects of the white mucous discharges, apply to non-pediculated, and when to polypous tumors, as he does not accurately express himself on the point, and calls them indiscriminately, fibrous tumors. The error of such generalization is here apparent. A tumor occupying the hypogastrium, and nearly as high as the umbilicus, is said to have subsided under excessive gushes and drainings of mucus, during the intervals of menstruation. Upon the changes which occur in tumors of this description, after pregnancy, Ashwell has written ably, in a paper in which he first proposes the "induction of premature parturition, as the best, and in many instances, certainly the only chance of a safe result to the mother." From these remarks, it would certainly appear that in cases of large immoveable tumors, complicating undoubted pregnancy, this measure, performed at the seventh month, does afford a useful means of avoiding the mischievous effects likely to be produced in the tumor during the latter months, and in labor, by contusion, &c., and of evading those greater dangers attendant on parturition. Ingleby corroborates Ashwell's views of the dangers

alluded to, in the following terms: "In all cases of tumors, the chances of inflammation supervening after delivery, must greatly increase, and I am not certain whether the frequent and violent contractions of the abdominal muscles on the tumor, in protracted cases, may not favor the attack." "But it must be allowed," says Dr. Ashwell, in continuation, "that pregnancy complicated with tumor of the uterus itself, of the ovary, &c., gives rise, *in labor*, to difficulties of the worst kind. In parturition, when the danger is produced by the narrowness or deformity of the brim, cavity, or outlet of the pelvis, the extent of the obstacle can generally be accurately ascertained. It is not so, however, in tumors which obstruct the birth of the child. Here the extent of the difficulty can rarely be correctly appreciated." "When the uterus generally," says Ingleby, "is affected by this disease, abortion will probably take place, but a partial enlargement may occasion malposition of the gravid womb, without interrupting the course of gestation, and *many instances of difficult and even fatal parturition* have been proved to depend upon this cause. If the tumor be confined to the fundus uteri, its presence may not be suspected and will not impede labor. In this town, a woman died apoplectic a week after her delivery. A large fibrous tumor, the existence of which was not suspected, was found developed in the proper structure of the fundus and body of the womb. Tumors of the cervix are more obstructive, acting partly by bulk and partly by destroying the correspondence between the long axis of the pelvic brim, and that of the uterus. From the rapid growth which these bodies acquire during pregnancy, and their liability to inflame and implicate the general peritoneum, the attendant should observe the state of the circulation, both previous to and for some days after parturition, so as to be enabled to detect the first symptoms of mischief and pursue an appropriate treatment." Montgomery remarks that, "When such tumors acquire great bulk, and pregnancy occurs, they give rise to a combination, *which imposes extraordinary difficulty in the way of a correct diagnosis*, and is moreover, fraught with fearful

danger to the unhappy sufferer. The distended state of the abdomen prevents an accurate external examination, and that *per-vaginam* is often impossible. To the feeling of the fœtal movements, and the stethoscope, we must chiefly trust; and sometimes the areola may aid us in forming our judgment." The cases published by Montgomery and Beatty, v. Bibliography, deserve, in reference to this subject, an especial examination. But it is to the writings of Ingleby that we must look for the weight of authority on this head; his numerous cases of impeded labor, and his valuable remarks, must of necessity be referred to by every investigator, (V. Bib.) Dr. Ashwell's paper has reference only to the changes which subsequently occur in them. Even now, however, the subject stands in need of further illustration.

Montgomery asserts that he is in the habit of attending two ladies, one of whom has had eight, the other five children, with easy labors and good recoveries; the former having two fibrous tumors as large as walnuts, on the exterior surface of the fundus uteri; the other, one of similar size, just over the entrance of the fallopian tube. They were not perceptible until the 4th month, and have never given any trouble. The author has seen at least two such instances. In one case, there was one small but very distinct tumor felt after delivery, in the other, more easily detected during pregnancy than afterwards, and neither productive of any bad consequences during or after confinement. Ingleby has known a fibrous tumor of the cervix diminish during pregnancy, which he attributes to a hemorrhoidal discharge.

Another mode in which these tumors may do harm, is thus alluded to by Lee; "In the Museum of the London University, there is one as large as a cricket ball, situated in the posterior and inferior part of the uterus. The patient from whom it was taken, died undelivered under peritoneal inflammation." The frequent occurrence of this affection, "*sine prægressa graviditate, sive post partum in puerperis*," is mentioned by Roemer, and must attract the notice of all. In 13 of the cases I have collected, it proved the cause of death. M. Hall men-

tions a case in which profuse menorrhagia occurred during 12 years of unfruitful marriage, caused by large tumors; these, the patient at length becoming pregnant, inflamed and suppurated, and led to a fatal puerperal disease, (Diag.) Two cases of death in childbed, are mentioned by Von Siebold, in his Diary, vol. 6, p. 183, and vol. 4, p. 41. The same happened to a patient attended by Dr. Chowne; and Dr. Lee, in the Cyclop., mentions the case of a woman who died in three days after delivery, of inflammation of the peritoneal and muscular coats of the uterus, from a large fibro-cartilaginous tumor, in its muscular coat, where the placenta adhered. Sandifort relates that "mulier coelebs, de insigni tumore magno, duro, ad tactum dolente, in regione hypogastrica conquerebatur. Non diu nuptiis impregnata, durante graviditate, varia mala sensit, quæ sexto mense insigniter increverunt, sicunt eo mense præmaturum enixa sit fœtum, vix quatuor horas superstitem. Primis diebus puerperii, omnia naturæ convenienter procedebant; deinde vero, spastici præ abdomen-dolores, lochiorum suppressio, febris, purpura rubra accesserunt, et auctæ, demum finem imposuerunt. In cadavere, inventum est sarcoma fundo uteri adnatum, et totam ventris regionem lumbalem replens, sex libras cum uncia pendens." (Obs. An. Path., lib. 1, ch. 8.) Anteversion, prolapsus, (Boivin and D.) and retroversion of the uterus, (Churchill, Clarke;) and rupture, (Hildanus,) may also result from fibrous tumors of that organ.

Ingleby states, that of 47 cases of the disease which he had seen, 9 had died. One from mere exhaustion, the emaciation being extreme, and the tumor equal to the gravid uterus at term; three from inflammation of the tumor; one from peritonitis, and one from phlebitis post-partum; one from hemorrhage in consequence of a fungoid growth of the lining membrane; one from protracted hemorrhage, in connexion with ovarian disease; and one under circumstances which he was unable to learn. Of the remaining 38, the disease in several *entirely disappeared*, and continues in the rest in various states, but mostly passive. In connexion with the last

sentence, let us observe, that the possibility of the spontaneous absorption of these tumors, of which Clarke gives an example, is not to be lost sight of in a consideration of the prognosis. According to Ingleby, they may disappear by a long-continued discharge, unconnected with a suppurative process. In a case, in which the size of the uterus was equal to a six months' pregnancy, the hemorrhage was excessive for at least three years; at first only at the menstrual periods, and during the five months which preceded its final cessation, it did not intermit a single day. The effect was the disappearance of far the greater part of the tumor, a very small portion of it the size of a hen's egg, remaining attached to the cervix. Here too, I may perhaps with propriety state, that Cruveilheir mentions the case of a Mrs. Caizi, who expelled from the uterus, on the tenth day after delivery, three softened, altered, rounded fibrous tumors, and recovered; also the case of a woman, not pregnant, who had hemorrhages for four months, followed by a very abundant and horribly fetid discharge, supposed to indicate cancer, who expelled small masses, which he easily recognised to be fibrous tumors, and recovered. Sometimes, during this work of elimination, a gangrenous state of the uterus occurs, and is fatal.

To enter fully into the *diagnosis* of fibrous tumors, relatively to the diseases with which they may be confounded, would require more space than can be occupied in a periodical. Much must depend upon the knowledge, tact and judgment of the practitioner, and accuracy will be best obtained by a careful study of the symptoms hereafter to be detailed, and an intimate knowledge and consideration of the distinctive peculiarities of the states of the uterus for which they may be mistaken. These are, pregnancy, true and false; retroversion and anteversion, which, it must be remembered, may co-exist with them; congestion of the uterus from suppressed menstruation; that form of uterine enlargement called by Blundell, "diffused scirrhus," and by Ingleby, "mere hypertrophy of the uterine parenchyma, or cervix alone;" carcinoma, partial scirrhus, according to Boivin and D., of uncer-

tain diagnosis; dropsy of the ovarium, according to Lee, difficult of discrimination, and to Burns, "the only disease with which they be combined"; polypi; extra-uterine fœtation and enlargement of the kidney, (Blundell.) "There is also," says Ingleby, "a form of uterine enlargement, comprising a thick, moderately soft and uniform swelling, occupying the interior of the cervix generally, limited to the mucous and sub-mucous tissue, and sometimes occasioned by the obstruction which a fibrous growth offers to the free return of blood." He further observes, that another possible source of error is, "to confound small-sized fibrous tumors with a peculiar displacement of the womb, comprising a curvature of the superior part of the cervix, having its convex surface towards the sacrum." "We must likewise take care not to confound the pushing upwards and forwards of the os uteri, by the presence of a fibrous tumor in the posterior part of the cervix, with retroversion of the womb, the orifice being forced upwards and forwards." There are brief remarks on the diagnosis in Boivin and in Churchill; but the 22d and 25th sections of Blundell's work on Diseases of Women, are particularly accurate and practical, and to these I refer the reader for much valuable information, upon a topic on which I cannot here further enlarge.

I had intended, in this part of my essay, to introduce the analysis I have made, of seventy-one cases of the disease now on record; but their length precludes, to my great regret, the opportunity of so doing. The reader must seek them for himself in the sources indicated in the Bibliography, at the end of the article. Before I proceed to the consideration of the symptoms and treatment of the disease, I shall offer him, from Bayle's Article in the Dict. des Sc. Med., his "Retrospect of the more or less distinct notices which are found in medical treatises, on fibrous bodies of the matrix, and the accidents which they determine."

"Modern authors have known, with sufficient exactitude, all that relates to fibrous bodies projecting into the cavity of the uterus. They have been called fleshy, sarcomatous and

fibrous polypi, and in some respects, have been treated of in a luminous manner. But *fibrous bodies enclosed in the proper tissue of the walls of the uterus, and projecting towards the abdomen*, have only been known with accuracy within a few years. They have been more or less exactly observed in different ages, and have been called scirrhi, anomalous tumors, ossified scirrhi and calculi of the uterus. Morgagni considered them the beginning of cancer; and Vn. Swieten, in his Commentaries on the Aphorisms of Bœrhaave, § 484, insinuates that cancer is a consequence of them, and points out many examples, by different authors, who have called them scirrhus. By Paulus Egineta, de Re. Med., lib. 3, ch. 18, they are called Scleroma. Fab. Hildanus, cent. 1, obs. 66 and 67; Ambrose Pare, lib. 24, ch. 41; Desgaux de Fobert, Anc. Jr. de Med., 1759, vol. 11, p. 336, and Chambon, Mal. des Femmes, vol. 10, had found very large ones. That of Hildanus was yet fleshy, Chambon's cartilaginous, and Desgaux's already ossified. Morgagni, Ep. 39, No. 36, cites several authors who had seen them. Trappe, Bib. Med, vol. 26, p. 340, presented a very large one in 1812 to the Instit. of Med. and in Dec. of the same year, Devilliers placed another, not less large, developed in the posterior wall of the uterus, and not complained of during life, in the Museum of the School of Med. at Paris, reported on by Chaussier in 1813." Bayle himself, wrote on them in the Journal de Med. vol. 5, p. 62, et. seq. in 1802; "but thus far," he remarks, in reference to his own article in the Dict. des Sc. Med., "no work exists in which they have been treated of relatively to their pathological anatomy, pathology and therapeutics."

The *etiology* of this disease is as yet obscure and conjectural. Mr. Abernethy, as is well known, adopting Jno. Hunter's theory as expressed by him in Mr. Home's paper, in the Trans. of a Soc. etc., vol. 1, p. 231, regards them as due to the organization of a clot of blood, somehow accidentally effused and deposited. Velpeau attributes them to a similar cause in the thickness of the organ itself. Blandin considers the disease as owing to the organization of fibrous coagula which form in

the anfractuous veins of the uterus. "Do they, locally considered," say Boivin and Dugès, "depend upon morbid and organic secretions, or upon elongation and extension of the uterine fibre? Is inflammation the cause of this new production? This appears very improbable," &c. By others they have been attributed to the development of a lymphatic gland, (Deguise,) of a sebaceous gland, (Smelliè;) by Chaussier they were considered as due to a local irritation of the mucous membrane; by some to the organization of mucus. It is well known that of late Drs. Baron, Hodgkin and Carswell have proposed theories in which they account, each with ingenuity and plausibility, for the formation of these heterologue deposits; the former, by supposing a single hydatid; the latter, several adventitious serous, self-producing cysts, as the formative agent of the disease; the last believing in the antecedent existence of the heterologous matters in the blood. To attempt even the most brief analysis of these different theories, would occupy more space than my narrow limits will allow. I must content myself, therefore, by referring to the original sources for the details of their author's views. I do this with the less regret that the subject presents no practical interest, and that the correctness of either is doubtful. (V. Baron, Inq. into the Nature of Tubercular Deposits; Hodgkin, Med. Ch. Trans., vol. 15. Carswell, Illust. of Path. Anat.)

The question of the *nutrition* of these bodies, I find best treated of by Malgaigne. In cases where they adhere only by a lax cellular tissue to the parts which surround them, and present no appearance of vessels, "we must," he says, "admit a nutrition by imbibition, a pure and simple endosmosis. The blood, coming from what source we know not, is imbibed, and makes for itself even, canals in the thickness of the tumor, by some regarded as true vessels; by others, (Walther, Meissner,) as ducts without proper walls, hollowed out in the cellular tissue like the holes in a sponge, which the latter calls sanguiferous or hæmatophorous canals. But Levret had seen an artery ramifying in the body of a polypus, as had also Dupuytren, and Breschet saw many vessels of a large calibre,

chiefly veins, enter into an enormous fibrous polypus. The same mode of communication, says M. Malgaigne, exists in the scrotum, where the adhesion of the testis to its envelops is attended with such wide vascular communications from one side to the other, that the ligature of the spermatic artery is not sufficient to obliterate it.

We come next to the *Symptoms* attendant on the existence of the Fibrous Tumor of the Uterus. I shall state them in the order of the frequency of their occurrence, and then append such remarks upon some of them, as appear to possess particular practical interest.

In ten of the cases I have analyzed, weight, or pain, or a sense of uneasiness in the loins and back were complained of; in ten, pain, or a sense of fulness in the hypogastric region. In one case, the pain was violent, and in one, the pubic bones became tender to the touch. The tumors are sometimes, but not always tender to the touch, or on pressure. In few cases which have attained to any size, are some of these feelings absent, though in others, as has been stated, little or no inconvenience is felt. Irritability of the bladder, or pain and difficulty in making water, occurred in nine cases, and in one was extreme. From my own experience, I should say that the characteristic symptom with respect to this function was a frequent desire to evacuate small quantities of urine, with a distressing bearing down sensation, and pain at the orifice of the urethra. Costiveness, or difficulty in evacuating the fæces, from the pressure of the tumor backwards, and often a complaint of a sensation as of a ball blocking up the rectum, to expel which fruitless efforts are made, occurred in seven cases. Roemer mentions one in which "rectum totum de loco suo moveatur." He also says, p. 20, that "John Burne relates a case in which a fibrous tumor of the uterus so compressed the ureter, as that the pelvis of the left kidney, and the calyces were much dilated, and a great part of the kidney itself was absorbed." The reference is not given, and if Mr. Burns of Glasgow be meant, I have been unable to discover the statement in his

work. Six cases were marked by cachexy, emaciation and debility. In eight cases, there were frequent large, irregular floodings; in one case passive, and in one proving fatal. The same thing has occurred repeatedly in a case now under my observation, and the frequency of the discharge is operating very unfavorably upon the health of the patient. *Per vaginam*, four or five tumors can be felt to encircle the base of the uterus above the neck, and one as large as the fist is both to be seen and felt in the abdomen, above and to the right of the symphysis pubis. In this case also, the urinary difficulty before alluded to, is a very troublesome accompaniment, and at times the uterine mass becomes extremely tender, with bearing down pains like those of labor, and a tendency to sinking. The patient is fifty years of age, a widow, and has a child thirteen years of age. In eight cases, leucorrhœa, sometimes simply mucous, at others serous, (Ingleby,) muco-purulent, sanguineous, acrid and irritating, existed. In three cases, the menses were painful, irregular, anticipating or abundant; and Churchill says they are often suspended altogether. In some cases the uterus is prolapsed; in others, tender to the touch. In some there occur hysteria, (Roemer, Sebastian, Ingleby,) tympanitis, vomiting, mammary enlargement and secretion, cramps and œdema of the legs and thighs, retention of urine, dyspnœa, inability to walk or stand erect, chlorosis and dropsy. (Bayle.)

In reference to the irregularity of the menstrual function, Roemer observes that it usually attends tumors of the parenchyma, or internal membrane of the uterus, and them only. He states that in a soldier's wife, whom Sebastian attended, the menses lasted as follows: fourteen days in June, eleven in July, nine in August, fifteen in September, seventeen in October, nine in November; they did not occur in December. They commenced on the 13th June, 12th July, 10th August, 10th September, 20th October, and 26th November. Leucorrhœa invariably followed them, and lasted for a week or ten days, but not in December, when she did not menstruate. The sequel of the case is this: in 1830 she

left Ultraject, and returned in the following year much changed and emaciated. The feet were swollen; she was distressed by continual pains in the belly and groins. A bloody mucus flowed from the vagina, and the os uteri was painful to the touch. Hectic set in; she died, and on opening the body, the uterus was found as large as at the fourth month of gestation. In its fundus, between the peritoneum and its substance, existed some small fibrous tumors; another, the size of a nut, occupied the middle substance of the uterus, a large quantity of pus being circumfused, which abscess communicated by short fistulous canals, with two lesser abscesses lower down; lastly, another tumor, one-half larger than the upper one, was situated nearer to the mucous membrane of the uterus, separated from it, however, by a thin stratum of the proper substance, so that thus access to the uterine cavity was prevented. The patient died apparently "metritis ipsius parenchymatis uteri."

In reference to the hemorrhage in these cases, Dr. Ingleby observes that, according to the healthy or unhealthy state of the lining membrane of the uterus, the discharge may be coagulable or not, or attended by the expulsion of colorless fibrine, or membrane, and a painful enlargement of the glandulæ Nabothi, cases which are often incorrectly supposed to be abortions. He says it is a well-known fact, that fibrous tumors increase in size just before menstruation, and that in cases where the shape of the uterine cavity is altered, the discharges may not find an immediate outlet, but be retained and expelled *en masse*. He mentions that an ovum was detained for three or four days, confined by fibrous tumors situated within the walls of the cervix uteri, on its posterior side, and the pressure made upon the anterior part of the neck interrupted its circulation and occasioned a large œdematous swelling, equal in size to the ovum itself, while the draining had gone on to a somewhat alarming extent. Floodings, he says, are greatest in cases of large tumors connected with the body and fundus, in which the lining membrane acquires increased thickness and vascularity occasioning frequent hemor-

rhages and watery discharges. The presence of a tumor is also attended with dysmenorrhœa, and some forms of painful menstruation can often, he thinks, be traced to the effect of pregnancy upon pre-existing fibrous growths, previously small and dormant; and in cases where it occurs after a first pregnancy, the condition of the womb should be carefully ascertained. It is accompanied by the formation of a false membrane. With this condition, muco-enteritis is apt to be associated. The same author asserts that an inflammatory state of the tumor will occasion a considerable degree of constitutional disturbance, the severity of the *symptoms* corresponding partly with the size and partly with the locality of the tumor. These are, augmentation of its volume, violent pain, especially on motion, tenderness on pressure, a loaded and sometimes glazed tongue, frequent pulse, heat of surface, sickness and vomiting, thirst, constipation, and suppression of pre-existing discharges; rigors rarely fail to indicate the stage of suppuration, the bladder will be more or less disturbed, inflammatory action extending perhaps to the mucous membrane, and the rectum may be so affected as to constitute mechanical obstruction. He mentions the case of a woman who had painful micturition, and supposed cystitis, and for a long time intense pain in the knee; on examination, he detected a cluster of large and hard tumors underneath the peritoneal coat of the uterus. It continued very severe for two or three years, and the constitutional symptoms ultimately destroyed her. The importance of ascertaining, by internal examination, the condition of the uterus, in cases where the irritation seems to be confined to the bladder alone, is not, says Ingleby, sufficiently appreciated. The examination should be made so as to reach the upper part of the cervix, where fibrous tumors constantly form. But a fibrous tumor may produce cystitis, ulceration, &c.; of this, a case is related by Dr. Thos. Thompson, Lancet, Mar. 30, 1839, p. 58. The tumor for some time plugged up the aperture; but on a sudden change of position, urine entered the peritoneal cavity, with a fatal result. See also Ramsbotham's case, which occurred from retention of urine during protracted labor.

Uterine *neuralgia* may frequently be traced to the influence of a fibrous tumor over a naturally irritable temperament. In one instance the vaginal examination was not only attended with serious pain, but followed by delirium, which continued more or less for several days. Fibrous tumor, chiefly the small sub-peritoneal variety, is a common cause of irritable uterus. (Ing.) But even supposing the tumor to remain for some time entirely passive, the period at length arrives when it may receive an impulse, say from marriage; the mass then grows, inflames, is productive of pain, and menstruation becomes deranged. Dr. Ingleby mentions the extension of this inflammation to the veins, constituting phlegmasia dolens, a case of which, thus induced, he has known to prove fatal. "I lately," says he, "saw a patient in consultation, who had a severe form of uterine hemorrhage, said to depend on placental presentation. Milk was freely secreted, but upon examination, the symptoms were found to originate in a fibrous tumor, the size of a hen's egg, connected with the upper part of the cervix uteri."

Two other circumstances are yet to be mentioned, particularly characteristic of this affection. I mean enlargement of the abdomen, and the detection of tumors in it by manipulation, or in the fibres, by an examination *per vaginam*. The degree of the first will, of course, depend upon the size to which the tumor or tumors have attained, at the time when the examination is made. A tumor as large as an egg and even smaller ones may easily be felt through the parietes of the abdomen in a thin woman, situated either in the median line, on either side of it, or in the hypogastric region according to the situation of the morbid growth. "If," says Blundell, who is much the fullest writer on the subject of diagnosis, of which he treats very practically in detail, "the disease be of the tubercular form, and of many masses, the uterus will have the tuberose feel and form. Tuberosity of the swelling is a useful corroborative diagnosis, but a smooth and equable surface is no disproof of the disease." In thin women, the outline of the super-imposed tumors can be very distinctly de-

fined. The examination will be much facilitated by placing the patient on her back, with the limbs drawn up, the bladder being previously emptied, and the abdomen well lubricated with lard or oil. The immense size to which some of these tumors attain, has already been adverted to. When, however, the tumor is too small to have ascended into the abdomen, or occupies the lower portions of the uterus, its presence can only be detected by a vaginal examination. That portion of the body of the uterus just above the cervix, will then be found to be very distinctly enlarged, and studded with *tuberose* masses, of various sizes, or a single one may occupy some part of it. They are usually smooth, hard, tender, or distinctly circumscribed, and a large one may have on it one or more smaller and harder super-imposed nodules, exceedingly distinct to the feel. If the tumors can also be felt above the pubis, and are not adherent, the application of one hand to the hypogastric region, while the finger in the vagina is placed upon the mass, and made to displace the uterus upwards, will convince us of the connexion of the tumors with the uterus, in a very satisfactory manner. In this way we may establish the diagnosis of a tumor growing from one side of the uterus, within the abdomen or pelvis, from an ovarian disease. The position of an ovarian tumor, of size sufficient to be detected, either in the pelvis or abdomen, would not probably be influenced by such repercussion; whereas, a tumor attached to the uterus would be felt to ascend with it, and if of sufficient size, to strike against the hand applied on the belly above; a solitary tubercle growing from the posterior wall of the uterus, and immovable from its size, might mislead us; but independently of its different feel, it is easy to ascertain the fact of its connexion with the uterus.

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I should next, if space permitted, proceed to consider the

NOTE.—In this essay, as originally written, the author here entered into a consideration of the subject of "the isolated tumor of the posterior wall of the uterus;" the remarks on which he has since published in a separate form, in the 8th number of this Journal, for September, 1844. As in that article he has detailed all that he

question, whether the *non-pediculated* tumor of the uterus, is to be considered as a morbid growth of the same species, as the *pediculated* tumor of that organ called *Polypus*. The question has been touched upon directly by but very few authors, and many have wholly neglected it. An examination of M. Malgaigne's thesis on Polypus of the uterus, will seem to convince the reader how much confusion exists upon this subject of pathological inquiry. Of those who have discussed the point, the majority incline to the belief of their identity. Bayle, Denman, Andral, Lee, Boivin and Dugès, Breschet, Mayo, Blandin, Cruveilhier, Davis and Gooch, are of this number; and I fully coincide with them in the opinion. Lee has this observation: "Although the facts which we have now stated, clearly demonstrate that the greater part of uterine polypi *are fibrous tumors*, formed under the lining membrane, and a stratum of muscular tissue," &c. I shall not at present pursue the subject, intending at a future period to lay before the profession the facts and opinions I have collected on the subject.

Before concluding this paper, I wish to offer a few critical observations on the nomenclature adopted by Dr. Blundell, when treating on this subject in his "Observations on some of the more Important Diseases of Women," (Dunglison's edition, p. 63.) Its twenty-first section is devoted to the consideration of the fibro-scirrhous, non-pediculated, tumor of the womb, and is headed "Scirrhus (indolent) of the uterus;" the variety in question is called "tubercular scirrhus," which

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knows relative to the *treatment* of that particular form of uterine tumor, *and of fibrous tumors in general*, he respectfully refers the reader to it for such information on this head of his subject, as it is able to impart. He records the following fact, with which his reading has since furnished him. In the Revue Med., Dec., 1841, is a report by Dr. Filhos, of a case in which M. Amussat enucleated, by means of the fingers alone, a fibrous tumor contained within the uterus. By the reporter, it is called an "interstitial" tumor; but the case is rather one of those described by Davis, as "not imbedded in the parenchymatous structure of the organ, but contained within its cavity, attached loosely by cellular tissue to its interior surface." The tumor was soft and fibrous, weighing four ounces. The patient recovered. See a report of the case, with remarks by the author, in the N. Y. Med. Gaz., May 4th, 1842.

is also said to be a third variety of *scirrhosity* of the uterus. Now, the term "scirrhus" of the uterus has been so long employed to express the malignant disease of the uterus, resulting in carcinoma, that I cannot but think that its application to tumors of the fibro-scirrhous character tends, not only to create confusion, and to lead to an incorrect idea of their nature, but is also objectionable as confounding two diseases of wholly different pathological nature; differing in the nature of the morbid deposit, and differing in the results of the morbid action which ensues in them. I am well aware of, and have asserted their occasional malignancy and softening and ulceration, but this is extremely rare, and even then is dissimilar to that of true scirrhus. Nor is the appearance presented on a section of these diseased masses ever exactly similar. The remarks which I have before quoted from him on the subject of the prognosis, cannot correctly be applied to the true scirrhus of the uterus. That the editor of this work has been misled by the use of the term, will appear to any one who will examine the 65th page of the volume, on which he will find some notes having no reference to the fibrous tumor, and applicable only to the true carcinoma of the organ. The 3d paragraph on page 64 is headed, "Extension of the disease to other organs," and we are told that the ovaria, fallopian tubes, bladder, rectum, and in rarer cases the liver and lungs themselves, are involved in the disorganization, in all three varieties of the disease." Here Dr. Blundell confounds the two diseases, the remarks being applicable only to carcinoma uteri. The second paragraph of section 24 is headed "Effects of the disease, (Scirrhus of the uterus;") and we find in it the following passages: "Add to this, that the disease may spread into the bladder or rectum, and parts adjacent, and I have known it to lay open the rectum into the peritoneal sac, etc." Nothing of this kind, we may safely say, has ever been known to ensue, nor can by any possibility occur, in cases of simple uncomplicated fibro-scirrhous tumors developed in or on the uterus; but it is the every-day termination of truly cancerous disease of the organ. It will, I think, appear from these quotations, (and similar state-

ments are to be met with on every page,) that the consequences of the latter affection have been intermingled with those of the first, under an incorrect appellation, in a manner extremely liable to perplex the student, and to engender incorrect ideas; and inconsistent with the precision and accuracy which might reasonably have been expected from a man of Dr. Blundell's deservedly high character, both as a pathologist and physiologist, as a practical obstetrician and as an author.

The disease, of which I have now treated, must be confessed to constitute a very interesting and important topic of obstetric study; always painful and distressing, of frequent occurrence, hitherto rebellious to treatment, not seldom fatal, and when complicating pregnancy, or labor, frightfully hazardous to the life of that sex, for whose welfare every philanthropist and every physician must feel a deep and tender solicitude. I venture then to hope, that I have rendered to the science of obstetric medicine, and to the practitioner, some little service, in presenting to his view a greater mass of information on the subject, whatever may be its deficiencies, than has ever yet been collected within the compass of a single essay; which could not have been gleaned from books without an amount of labor and research, and a sacrifice o time, which few are either able or willing to devote to it, or to expend in the pursuit. I hope too that the subject of their diagnosis and treatment, have received some useful expositions, which will tend to promote the interests both of the patient and physician.

POSTSCRIPT.

S. S. PURPLE, M. D. *New-York, Sept.* 25, 1849.
Editor N. Y. Jour. Med.

Dear Sir,—The Essay on the Fibrous Tumor of the Uterus, which I submitted for your inspection, was written some six or seven years ago. Circumstances, at the time, delayed and eventually prevented its publication, and the MSS. was mislaid, and has only been of late recovered. If it appears to you to merit the honor of an insertion in your excellent Journal, it is at your disposal. It was, *up to the time to which I carried it*, as complete as my opportunities of research enabled me to make it. If time and health are spared me, I will, with your permission, post it up to the level of the present time, during the coming winter.

Respectfully and sincerely, I am your friend and well-wisher.

WM. C. ROBERTS.

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ART. III.—*Remarks accompanying "Quarterly Report of Sick and Wounded for the quarter ending March 31st, 1849."* By J. B. WELLS, M. D., Surgeon U. S. Army.

Monograph of vegetable poisoning. On the 8th March, 1849, at 3 o'clock, P. M., three privates of the 5th Infantry were brought to the hospital, laboring under symptoms, bearing strong similitude to "Epidemic Cholera;" their names, "Farrell," of "I" Co., "Fitzpatrick and Mulligan," of "C." Co. Symptoms, vomiting and purging of large quantities of serous matter, violent pains in the stomach and bowels, clonic spasms of the gastrocnemii and abdominal muscles, great depression of the vital powers; burning sensation in epigastrium, tortured by thirst, tendency to collapse, and dilated pupils in each case, without impairment of intellect or tendency to coma. In Farrell's case, collapse perfect, asphyxiated, visage ghastly and cadaverous, blueness of the hands; in one word, he was in an extreme state of collapse. Believing from the condition of the pupils, that the men had eaten something poisonous, I prescribed mustard emetics, laudanum in *full* doses, stimulants internally and externally; and a solution of carb. potass, to allay thirst. In the course of the afternoon, it was ascertained that these men had been eating "Heracleum," or parsnip, (raw,) and their suffering was consequent thereon. They all *recovered*, after symptoms of gastro-enteritis were combatted. Cholera, (epidemic,) prevailing at this time in the valley of the Mississippi, fears were expressed by some, that this disease was in our midst, but for myself, I felt satisfied, (from one indication alone, dilated pupils,) that they were not cholera cases, and so pronounced it; and all three recovering was pretty strong evidence of the correctness of my diagnosis.

FORT GIBSON, Cherokee Nation, March 31st, 1849.

ART. IV.—*Remarks Accompanying "Quarterly Report of Sick and Wounded for the Quarter ending September 30th, 1849."* By J. B. WELLS, M. D., Surgeon U. S. Army.

IN my report of sick and wounded of June 30th last, I remark, "the cases of diarrhœa under treatment, were impressed with the constitution of atmosphere favoring the development of epidemic cholera." These "constitutions of atmosphere" appear neither limited in their range by the bounds of a district, nor the parallels of a latitude, and are independent of heat or cold, dryness or moisture, climate, soil, season or locality. Some appear to consider them as an emanation from the bowels of the earth, in contradistinction to malaria or exhalation from the surface. But the fact is, we know not whence they come, and are equally in the dark about their nature, and we know as little about malaria itself, neither being manifest to the sense or amenable to chemical experiment. The agency of something which we term malaria is considered fully proved; and in like manner, "epidemic influences" are known by their effects; as an instance of the latter, better observed, because more frequently occurring, we need only allude to that which gives rise to "catarrhus epidemicus." Whatever mystery, however, may overhang the character and operations of the remote cause of "cholera asphyxia," there can be no doubt as to its true pathological condition; this condition is one of irritation of the gastro-intestinal mucous membrane, followed by a recoil of the circulation of the blood to the interior, corresponding collapse, congestion of the portal circle, oppression of the vital energies of the liver, suspension of its secretion, exhalation of serum into the gastro-enteric cavity, efforts on the part of the stomach and bowels to discharge what is unnatural and offensive; vomiting and purging, violent on account of its quantity; action of the abdominal muscles, spasmodic, often extending to other and distant parts of the muscular system, to remove the accumulation, until, in favorable cases, reäction occurs by

reflux of the fluids of the surface, relieving in part the portal embarrassment, and at the same time exciting the secretions of the liver, etc., to a restoration of their functions, which, when complete, quiets the commotion, the symptoms subside, and the patient recovers. Such appears to be its "ratio symptomatum." In unfavorable cases, the circumstances constituting the chain of events from an aggravation of the exciting cause, down to the effort of the stomach and bowels to rid themselves of the vitiated fluids, being more intense, the favorable phenomena of *resecretion* and *reäction* do not occur; the violent action of the abdominal muscle causes contraction, in a greater or less extent, of the locomotive apparatus, by sympathy of structure, which continues to present tetanic rigidity, until the energies are exhausted; while the circulatory system goes more and more astray in its loss of balance; the blood ebbing from the surface, leaving it cold, shrunk and blue, (cyanotic,) until the patient is relieved from his sufferings by death. There being no time for inflammation to be set up from the commotion, the free flow of the fluids downwards saves the brain from congestion and damage; hence, the functions of intellect and those of sensation stand unimpaired amid the ruins around them.

Morbid anatomy sheds no light on the phenomena of the disease or the cause of death. How should it? for in fatal cholera, (foudroyant of M. Tardieu,) consisting of terrible subversion of function, where the cerebral, respiratory, and most of the secretory organs sink to inaction from want of the vital current to sustain their energies, those vessels being drained by irregular distribution, excessive discharge and altered qualities of the circulating fluids, while in the locomotive apparatus, exhaustion and paralysis succeed to inveterate spasms; there should be no lesion of structure, and accordingly none are to be discovered. Amidst favorable circumstances, a large majority of patients in cholera recover under proper treatment, but should the exciting cause be intense, should the healthful sympathies of the alimentary canal and its collatitious viscera be disturbed, and should the nervous and

muscular systems be unstrung by intemperance, the chances of recovery are lessened in proportion. The indications of treatment are to promote reäction and restore the hepatic secretions, the fulfilment of one being invariably the fulfilment of both indications. Most of our remedies are indirect in their agency. Powerful revulsives to the surface to invite centrifugal circulation, internal stimulants to spur on the languid action of the heart and arteries, calomel and camphor in such doses as to secure the free play of the secretions and allay spasms, are the means which should follow the admission of the foregoing theory, and accordingly was found successful in the management of this disease. Calefacients, dry frictions, rubefacients, are almost pointed out by the condition of the surface, and need no remark. Having written thus much, I will now write more in detail. On the night of the 15th of July last, four privates of the 5th Infantry were brought to the hospital, (in quick succession,) collapsed and pulseless, agonizing under spasms, vomiting and purging rice-water-like discharges, algid surface, tongue cold, cyanosis of the extremities and facies. I resorted to the remedial means herein referred to; but in vain. Death took place in each case in from six to eight hours. Two of the cases had spasmodic or irregular snatches of the tendons for one hour after dissolution. The urinary secretion was entirely suppressed, as no urine was found in the bladder after death; and so, with shades of difference, in all who died. Catherism was performed in all the severe cases, to test the presence of urine, with the above result.

Now, therapeutically, if on the admission of a cholera patient, vomiting and purging were present, I immediately exhibited a mixture composed of morphine and aromatic spirits of ammonia, in camphor water; this failing, I gave four drops of creosote in gum arabic mucil., which generally composed the stomach. From my own observation of this article in chronic diarrhœa in Florida, and reflecting on its strong tendency to coagulate animal juices (albumen,) I determined to make trial of it, and the result proved entirely satisfactory.

Furthermore, I was pleased to find in the July number of the "Medical Examiner," published in Philadelphia, a report of two cases of cholera, by Surgeon C. A. Finley, U. S. A., the following remark—"Creosote was given to check emesis, and with good effect." The stomach being quieted for the moment, I gave at once ʒ j calomel and 10 grs. of camphor combined, this powder was repeated if necessary in one hour, and then its administration was regulated by the discharges, their frequency and color, if for the former one-half the dose, for each discharge, and as soon as any *color* was perceived in the discharges, it was gradually discontinued, for with such a discharge reäction was sure to succeed, recovery to dawn, and convalescence to follow. Quinine was then introduced into the system, to maintain the action of the heart, and aperients to work off the mercury in those cases where the pulse was the merest quiver, internal stimulants were freely used, conjoined with the above treatment, and every portion of the body and extremities covered with hot mustard cataplasms, and the spinal column freely irritated with hot spirits of turpentine. As to preventive measures, beyond a strict police, embracing cleanliness of person, etc., it is impracticable in the army to advise any observance of the non-naturals, for duty must be performed, changes in dress were attended to, to correspond with mutations in the weather. Dietetically, the ration of rice was increased, and the command kept on this and fresh beef. I cannot believe, however, that wholesome fruits and the more digestable vegetables are *injurious*, and had the season been favorable to their perfect maturation, I should not have excluded their admixture with the diet enforced. The differential diagnosis between this disease and the symptoms of "vegetable poisoning," is exceedingly obscure, for confirmation of this remark, please refer to the three cases reported by me, as successfully managed by the "sedative plan of treatment," in my sick report for the quarter ending 31st March, 1849. (Vide page 56, *Ed.*)

Recapitulation.

Cholera Patients.	Died.	Cured.
214	22	192

I have the honor to be,
Very respectfully,
Your ob't servant,
J. B. WELLS,
Surgeon U. S. A.

To Dr. TH. LAWSON,
Surgeon General U. S. Army.
Fort Gibson, Cherokee Nation, *Sept.* 30*th*, 1849.

ART. V.—*Remarks on the Pathology of Erysipelas.*—By H. N. BENNETT, M. D., of Bethel, Conn.

IN a former number of this journal, I advanced the idea that the true anatomical pathology of the disease termed erysipelas, consists principally, if not exclusively, in inflammatory lesion of the areolar tissue. To give a more definitive form to this idea, I conceive that the areolar tissue is the point of departure of all erysipelatous inflammations, whether occurring in the more simple or complex structures—that an erysipelatous inflammation in the dermoid system is identical in its anatomical elements with the same disease in the subcutaneous cellular membrane, that whenever the cerebral meninges, the pleura, the peritoneum, or the viscera, are invaded, it is still their areolar component. I formerly adverted briefly to the varieties and general diffusion of this tissue, in illustration of my hypothesis. I need not go over this ground again. I shall endeavor to point out, at the present time, in what manner it is farther sustained by the various circumstances of the location of inflammatory lesions in different portions of the body during the progress of erysipelas, and by the similarity of the constitutional symptoms, in whatever part the disease may make its special anatomical expression.

The history of all epidemics of erysipelas, as well as that of numerous sporadic cases, proves beyond a cavil, that various parts of the body are subject, during the progress of

this malady, to inflammatory lesions. He who has seen many sporadic cases, can scarcely have failed to witness one or more fatal terminations, with decided symptoms of meningeal inflammation and effusion, and whoever has witnessed one epidemic, can testify to the greatest variety of local lesions, not singly, but in groups. Dr. Shipman, speaking of the different parts of the body affected, says that he believes that *every tissue* is liable to be attacked, and enumerates the membranous systems, the muscles, tendons, bones, etc. Drs. Hall and Dexter, and all who have written the histories of the different epidemics in this country, also testify to the diversity of the seats of inflammation in this disease.

The connection between erysipelas and a very fatal form of puerperal peritonitis, is positively established by the concurrent testimony of numerous writers, not only in this country, but in Europe. The hypothesis which I have advanced, appears to afford a ready explanation of this latter phenomena, the most important connected with the whole subject. The peritoneum being almost entirely a membrane of condensed areolar tissue, and having a less compact substratum of the same anatomical element, is placed by the process of parturition in a state eminently capable of taking on diseased action, and is the first to suffer in the lying-in woman who becomes infected with the poison of erysipelas. The epidemic which occurred in this town, gave a most conclusive proof of the identity of this form of puerperal fever and erysipelas. Out of thirteen infants born of females who succumbed to puerperal peritonitis, no less than five died, at periods varying from three to eight days after birth, with well marked cutaneous erysipelas, and one after a longer period, of extensive inflammation and suppuration of the subcutaneous cellular tissue, while not a single infant born of a healthy mother, contracted the disease. Is it possible to evade the conclusion that the poison which infected the mother was identical with that which destroyed the child?

I cannot but refer here to some remarks upon this subject, by Dr. Meigs, in his letters on "*Females and their*

Diseases." In the forty-first letter, he mentions the startling fact, that in the practice of Dr. Rutter, fifteen children died of erysipelas, out of ninety-five born of mothers who suffered from puerperal fever, and yet without an effort to explain this striking coincidence, he proceeds, in a subsequent part of the letter, to assert, that "there is not, and cannot be any identity between erysipelas or dermal disease, and the deadly inflammation of the peritoneum, observed in lying-in women." Adopting the hypothesis that erysipelas of the skin consists in a specific inflammation of its areolar woof, instead of that which maintains that "it is always an *angeiolencite*," and it would not be "absolute nonsense" to say that a lying-in woman "has an erysipelas of the serous lining of her belly." The coincidence of erysipelas of the dermis and post-puerperal inflammation of the peritoneum is incontestable, and the pathological views which I have advanced, constitute it a direct relation of cause and effect.

It is contrary to analogy, to suppose that erysipelas attacks indiscriminately all the elementary tissues of the body. Specific inflammations manifest strong affinities for particular tissues, and erysipelas certainly discovers a marked preference for those parts of the body in which the areolar tissue abounds. The face is pre-eminently the most frequent seat of the disease, and from hence it many times spreads over the entire cutaneous system, exhibiting the most striking marks of propagation by continuity of tissue, the inflammation declining in parts contiguous to the point of departure, long before the most distant have become involved. Is any other tissue so well adapted as the areolar to this progressive lesion? The dissection of a case of phlegmonous erysipelas recorded by Gendrin, *(Hist. Anat. des Inflammations,)* admirably illustrates, in some points, the extension of this inflammation to the minutest distribution of the areolar tissue. He says: "Some arterioles and nervous filets traversed the *foyers* (of pus.) The laminous tissue which surrounded the former was dense, red, friable; it was resolved into a soft pulp in contact with the pus, and then gradually approximated the

natural state, which it preserved immediately about the vascular canal. The nervous filets appeared to us healthy, notwithstanding they were reddish, *and we thought that the cellular tissue which enters into their composition, was inflamed; at least it appeared so under the lens; but the nervous tissue, properly so called, appeared to us in a state of integrity.*"

Nothing but the closest anatomical investigations can ever divest the idea which I have thrown out of its hypothetical character, and it is for the purpose of instigating these researches that I continue to insist upon the plausibility of this pathological doctrine. I am sanguine of the result of well directed post-mortem investigations of the various parts involved in inflammatory lesions, during the progress of erysipelatous fevers, and believe that they will warrant the abolition of the term *erysipelatous*, and the substitution of *areolar*, as descriptive of the special anatomical expression of this peculiar form of febrile disease.

The uniformity in the general symptoms of erysipelatous fever, has been a subject of remark for all who have witnessed it, and it is an incontrovertible fact, that the febrile phenomena in this affection are not at all modified by any variety of local lesion which may occur during its progress. It matters not whether it be an external erysipelas or subcutaneous cellular inflammation, or pharyngitis, an arachnitis, a peritonitis, (except the puerperal,) they all occur *under the direction* of the peculiar genius of the disease, and the characters of the febrile movement are unchanged by them. While the most appreciable differences between one case and another of similar intensity, are the local lesions developed, and while these may be widely divergent, the general phenomena receive from them no special stamp, but impress upon them certain characteristics not to be mistaken. I do not wish to be understood that every case of erysipelatous fever is similar in its periods of rise, state, decline, and termination, and that the differences of local lesion do not retard or hasten these periods, but that the formative powers of the disease, if I may use such an expression, are identical in all

cases, and that they stamp upon the organic lesion fixed characters. To give an example, the bronchitis which frequently occurs in this disease, is not accompanied by either the rational symptoms or physical signs of a common bronchial inflammation; it is characterized by an absence of cough, an extremely hurried respiration, with copious sero-mucous effusion into the air passages, proving rapidly fatal. In those cases which I have witnessed, the bronchial lesion was evidently a mere extension of the erysipelatous inflammation of the fauces and posterior nares, which is as common to erysipelas as the anginose affection is to scarlatina.

In the case of puerperal peritonitis there is a special modification of the symptoms, and a determination of locality, dependant upon the peculiar condition of the organism during the reproductive process, so that while the disease still adheres to its favorite tissue, it is directed to the peritoneum by a secondary influence, which also changes in a measure the general aspect of the symptoms.

If, then, it is an established fact that in the malady termed erysipelas, various internal and external inflammations occur as the result of the specific character of the general disease, what more rational supposition, than, that it is the same elementary tissue of the different organs which suffers the primary lesion? To suppose that in different structures, different elementary tissues become the seat of the same specific inflammation, is to suppose that a certain specific poison is capable of producing like impressions upon all parts of the organism. Such a supposition is at variance with all known pathological laws.

If I shall succeed in directing the attention of those better qualified than myself to investigate this subject, I shall have accomplished all I desire.

ART. VI.—*Two Cases of "Morbid Erectile Tissue." Treated Successfully by Heated Needles.* By J. W. SCHMIDT, M. D., of New-York. Reported by W. M. FITCH, M. D., of Charleston, S. C.

As regards the name of the disease in point, its synonymes are several. We have "aneurism by anastomosis" of Bell; "morbid erectile tissue" of Dupuytren, "erectile tumors," "nevi," "birth stains," &c. We prefer that of Dupuytren, as being more significant in expression. Jno. Bell first clearly pointed out the peculiar characters of this disease, ascribing it to close commingling of dilated and tortuous branches of arteries and veins, by means of cells of the cellular tissue—later writers, however, consider his "cells of cellular tissue," to be nought but the enlargement and dilatation of portions of vessels, freely inosculating. The disease may exhibit itself on any portion of the surface, or even in internal structures. It is most frequently congenital, perhaps small and indistinct at birth, but increasing with general growth, oftener slowly and surely, than rapidly. One or two rare cases are reported, in which there was this disposition to increase, They have unaccountably, spontaneously disappeared, but this fortunate result is most rare indeed. Its appearance differs much—now it presents lateral and superficial extension, then again a tumor of smaller neck and larger base, then one of deeper implication jutting out, and extending upon the cutaneous surface. All agree in this however, viz.: more or less pulsation existing upon pressure; the color generally is quite purple, now and then of a florid hue; coughing, crying, mental emotions, position, all more or less induce temporary increased tumefaction. Besides attendant deformity, they are most dangerous in the event of accidental injuries, causing their rupture, whence often uncontrollable hemorrhage supervenes.

Of remedial processes presented, several attract the eye of the surgeon, viz.: pressure, caustic, setons, needles with twisted thread for strangulation, vaccination, subcutaneous incisions, excisions, and heated wires or needles, etc. With the

exception of the last mentioned, many objections can be urged against the inefficiency of some; the suffering and torture produced, and violent attendant hemorrhage of others.

The merit of the heated needle process consists in its general applicability, the celerity of the operation, less suffering, amount of hemorrhage, more frequently limited, results eminently successful. The ingenious suggestor of this method is unknown, and hence its history is all wrapt in obscurity, save that of later periods—say that of the past eight or ten years.

Among the first operators in America were Drs. Mott and Schmidt, of New-York. Since then the operation has become more general—sufficiently so as now to be styled the "American process." Dr. Schmidt being on a visit to his native city, Charleston, in June, 1847, was called upon first to operate for this affection, on a male infant, six months old. The history of the origin of the tumor is interesting, as being one of the many instances which can be adduced to exhibit the power of violent mental emotions of the mother to affect the fœtus in utero, in the way of "birth stains," "marks," &c. The mother, a lady of refinement and intelligence, of nervous temperament, was from some affection of the left eye-tooth, compelled to apply to a dentist for relief, he advised a leech to be applied to the inner surface of upper lip. The lady, at this time, was unconsciously in the first month of pregnancy, and dreaded and shuddered at the application of the leech. At the birth of the infant, a small blue-ribbed line, bearing the appearance of a leech was noticed on the mucous membrane of the upper left lip, answering to a similar point of the mother's lip where the leech had attached itself. At birth, it was just perceptible, but as the infant thrived, so the erectile tumor increased, until at the time of the operation, it was about the size of the largest nutmeg, causing the lip to jut out, and throwing it up towards the nostril. It had a purple color, doughy feel, and a pulsating character, and was much puffed out upon crying, &c. The disease naturally gave unbounded anxiety to the minds of the parents, and with mingled feelings of pain and pleasure, they embraced the idea

of a successful operation,—of pain at the thought of the suffering and risk to be undergone by the little, unconscious one, of pleasure, at the idea of the perfect obliteration of the deformity. Dr. Schmidt, after a careful examination, fairly stated to the family the risk of the operation arising from hemorrhage, but still thought all the probabilities in favor of a successful result—a day was appointed for the operation, June 9th, and several friends were present. The doctor's instruments consisted of eight spear-pointed needles, one-sixth of an inch in diameter, and a large alcoholic lamp, for the heating of the needles. The infant was held in the arms, well wrapped up in a piece of light cloth, leaving only its head exposed. An assistant continually heated the needles for use. Dr. S. thrust heated needle after needle, at a red heat, into the tumor, to the number of some 30, having great care of the cutaneous edge of the lip, that it might not be disfigured—while one needle was being applied, others were in the flame, so that no time was lost in their application. The operation consumed not more than ten minutes. The hemorrhage was very limited, and the little subject appeared to suffer but little; after the operation, it immediately smiled upon seeing its mother enter the room. Six hours after the lip was much swollen and heated from inflammatory action setting up—cloths were ordered to be continually applied, moistened with rum and water—one part of the former to six of the latter—shortly after the operation, three drops Tr. opii were given and it slept quietly some hours. It resumed its nursing with comparatively little inconvenience. Sloughs commenced to come away on the third day, when weak kreosote water was used as a wash for correcting the fœtor, and acting as a gentle stimulant. The wound continued improving, with but little change until quite healed. Twenty-two days from operation the part looked quite natural, with the exception of a slight notch on a point of the lip where the disease had extended; this was destroyed by cautery. Six months after, a slight discolored swelling appeared, about the size of half a pea, being evidently a remnant of the former disease. The succeeding June,

1848, Dr. S. again visited this city and repeated the operation, thrusting in four or five needles; the part healed, but not so quickly as before. More than a year has now elapsed with no return of suspicious appearances.

Case 2.—Upon Dr. S.'s again visiting Charleston in April, 1849, a similar case, but of graver character, presented itself to his attention. The subject was a lady, about 30 years of age, of good constitution. It was congenital with her, increasing slowly as she grew up, but after menstruation it inclined to increase more rapidly. When Dr. S. examined it, it was about the size of a small hen's egg, situate at the same point as in the other case, a rare coincidence of two cases of the same disease, thus successively presenting themselves to the notice of a surgeon at the same point. The tumor caused much deformity of the face, forcing the upper lip to jut out, and encroached upon the left nostril, filling up the enlarged space between the nostril and the corner of the lip, producing discoloration as high even as the malar bone. The pulsating feel of the tumor was well marked; stooping down or holding her head in a dependant position, would cause it to swell out to at least half more than its natural size, presenting almost a black appearance, crying, or any mental excitement caused it to puff out for the moment. Just before menstruation it was a little larger than usual. The features of the lady were generally regular and prepossessing, but this deformity marred everything. Perhaps womanly vanity impelled her to undergo any risk to be relieved from her unsightly blight.

Dr. S. informed her of the danger of accruing hemorrhage, but having already determined upon submitting to the operation, she was still anxious to have it performed. For so extensive a tumor, ordinary operating needles would not answer, being too small in diameter—six were made for this purpose, one-eighth of an inch in diameter, and about six inches in length, handles not included—three were spear pointed, and three square pointed, a tinman's hand-furnace, with ignited coal was brought into the room, for the purpose of

heating the needles—an assistant having charge of this process in the operation.

The operator commenced as before, thrusting one heated needle after another in quick succession into the tumor, and allowing them to remain perhaps twenty seconds at a time, now and then he had three needles at one time thrust into the tumor, and withdrawing them, pierced points yet untouched. The needles, in this case too, were introduced through the mucous membrane of the upper lip, again using every precaution not to deface the cutaneous edge—some forty needles were thus introduced and withdrawn, considerable blood had been lost, the parts seemed well acted upon by the cautery, the tumor having shrunk in a small degree, yet blood still poured forth freely in continued jets—point after point, where blood seemed to spring from, was thrust, yet all proved unavailing—recourse was then had to several large and straight sounds, about the size of the little finger, heated to a red heat and thrust into the bleeding apertures, with the effect to restrain the hemorrhage. The pulse had now become affected, feeble in force, in volume thread-like, her cheeks became blanched, and twice syncope embarrassed the operator. The idea of a successful operation was now becoming a dubious one, and friends were fearing an unfortunate issue. The doctor luckily bethought himself of the punk and sponge, which he applied with the most beautiful result. He adopted two layers of punk directly to cauterized surface, over this a piece of compressed sponge, confining all pretty tight with a compress and bandage; with this arrangement, blood ceased to flow, and shortly even to ooze. In a little time, infiltration of the upper lip and cheek, as high as the malar bone of same side took place, giving that side of the face a disagreeable blue appearance, to the feel, firm and tense.

The operation, with its accidents, lasted near an hour. Before the operation, she much desired the administration of chloroform, which the doctor, after much entreaty on her part, consented to, he himself being averse to its use in this

case. It had to be quickly desisted from, for two reasons, it rendered her highly excitable and unmanageable, then again the danger of strangulation from blood pouring down the throat in the state of anæsthesia; after its attendant excitement wore off; she bore the operation with much fortitude. Four hours after the operation, she was visited—found no hemorrhage, and general feeling comfortable. Gave ten grains Dover's powder.

April 19*th*. Passed a quiet night; some little excitement about the pulse, and some heat of skin; bandage felt uncomfortable, it was removed, leaving only the punk attached; ordered the face and wound to be washed with weak rum and water, and directed the swollen portion to be kept continually moist with it. At bed-time, she complained of slight headache; ordered mustard foot-bath. *Friday* 20*th*. Passed a fair night, constitutional disturbance only slight. The application being disagreeable to the patient, it was changed for the best German cologne, diluted with water. Bowels have moved twice naturally since the operation; diet light and nourishing; parts locally present about the same appearance. Towards evening, she became excited and restless, from conversation with others, when she was ordered x grs. Doveri. 21*st*. Passed only a tolerable night from fear of hemorrhage, which was ungrounded. Parts in appearance same, except a small spot at the left alæ of the nose, which is discolored; a little offensive secretion is seen oozing from the cauterized surface; punk still adherent; stomach, from the secretion, inclined to nausea, so that little nourishment was taken; prescribed yest poultices to the part, to be renewed every three hours. 22d, Sunday, punk came away in the night without any hemorrhage; ordered the yest poultices to be continued regularly, and when poultices are removed for change, wash the part with weak chloride of soda water; bowels confined, prescribed a portion of manna. The dark spot is inclined to enlarge, the poultice is to be applied well over it. She has no febrile excitement, and upon the whole is comfortable. 23*d*. Manna had acted gently, nausea of the stomach is lessened, the dark spot

is still enlarging, and inclined to slough. Towards evening, the whole lip pained her much, and she became quite restless. She has taken for the last two days pulv. cinchona, a tea-spoonful every four hours. Ordered ten grs. pulv. Doveri at bed-time; no other portion of the lip is discolored except that point near the alæ of nose. 24th. The dark circle still looks badly, but cauterized portion of lip is commencing to come away as wished for. The general appearance of the parts is fair. Felt quite comfortable for the day.

April 25th. Passed a restless night, and she is this morning desponding in spirits, although there is no perceptible cause for it. The wound still looks well, and the sloughed circle is cleaner, and not disposed to enlarge; continue the application; Dover's powder at bed-time. 26th. Passed a good night; the proper sloughing still continues from the cauterized surface of the lip. It is not excessively offensive, being well corrected by chloride of soda wash; the lip is much reduced in its general enlargement; continue applications. 27th. Doing well; opening still the same, cauterized cavity discharges freely. The parts were ordered to be washed with a decoction of bark with a little chloride of soda; yest poultices still continued. 29th. Lip much reduced in size; no traces of enlarged vessels present; discharge not so much nor so offensive; the external opening near the alæ of the nose still the same; internal cavity yet considerable, say sufficient to hold a large nutmeg; discontinue yest poultice, but continue the injections into the cavity, and dress the parts with simple cerate spread on thin lint; patient's spirits are now quite buoyant, with the prospect of complete relief from the deformity. The opening gives her some anxiety, fearing it will never close up; general health excellent.

May 4th. While stooping down to lift up an infant, blood dropped from the wound. At first, it was thought that it came from the cavity, but upon closer observation, we found it to proceed from a little fungous growth on the edge of the lip; applied nit. argent. The appearance of the part now is excellent; the lip is almost of natural size; the cavity is

filling up, and there is little discharge. 10th. Healing process is rapidly progressing. 16th. The parts are quite well, there is now no deformity whatever. Lip is natural in size, and there is scarcely any indentation at the alæ of the nose, where the aperture was. Her friends state they have never seen her look so well since birth.

ART. VII.—*Cases of Permanent Stricture of the Urethra, Cured by Cutting.* By JAMES BRYAN, M. D., of Philadelphia, Professor of Surgery in Geneva Medical College, N. Y.

To the Editor of the New-York Journal of Medicine, &c.

DEAR SIR,—I promised, when I last saw you, to send a short communication, for the pages of your valuable and extensively-read Journal. It has occurred to me, in looking over my notes of cases in my day-book, that perhaps the following cases will be as interesting as any thing I can send; as they relate to a very common disease, and one which it is difficult in the ordinary way to *cure*, it will be proper that I should premise a few general remarks on *my* plan of treatment.

It is well known, that the common modes (dilatation and caustic) of treating permanent strictures, are to the last degree unsatisfactory. Patients are relieved temporarily by the forcible introduction of bougies, especially conical ones; by the judicious use of caustic, &c., but the disease generally remains, and the patient either returns to the surgeon, or goes to another for further temporary relief. Years pass on, and the stricture becomes gradually worse, until the patient, especially in cold weather, is in daily danger of a rupture of the bladder, from retention of the urine, and the impossibility of passing *any* instrument through the urethra into the bladder. In other cases, the patient is doomed to carry with him at all times, a number of bougies and catheters of "assorted sizes," in order to relieve himself under the almost certain emergency. I cannot perhaps, better detail my mode of treating these *hard* cases, than by referring to one which came

under my care several years ago, with three others which followed. It was that of Mr. S., a young married man, who had for nine years suffered from stricture in its worst form. We had gone through the usual dilating and caustic treatment, with temporary relief from time to time, until the canal had, as far as the introduction of any instrument went, entirely closed. A very small stream, or rather dropping of urine, which of course demanded a long time to evacuate the bladder, was the extent of his power of urination. He had in fact, several times been in danger of rupture of the bladder from retention. Having tried a large number of our most respectable surgeons without permanent benefit, he despaired of relief. On examination I could distinctly perceive from without, commencing about 5½ inches from the mouth of the urethra, a large cartilaginous stricture, which seemed to extend 1½ or 2 inches along the passage. On reflection, I came to the conclusion that nothing but a complete division of the strictured part would be of any avail. I called upon our surgical instrument makers, but found nothing that I could use, but got Mr. Shively to make me a flexible metallic catheter, with a stylet, on the distant end of which was fixed a blade. With this instrument (a full account of which will be found in the Medical Examiner of 1847,) I succeeded in a few sittings in entirely dividing the stricture; since when, he has had no difficulty in urination or symptoms of the disease. The following cases have occurred since that time.

Mr. B., a respectable merchant, from a town in the western part of New-York, came to Geneva, while I was lecturing there on surgery; and consulted me about his case. In my notes, I find that he applied on the 15th of June, 1849. The stricture was of 12 years' standing. He had consulted many eminent surgeons in the state and city of New-York; had had caustic, dilatation and *scarifications* tried. In reference to the latter mode of treatment, my opinion is that, at best, in the cartilaginous form of the disease, they can but palliate. Mr. B. supposes there are two strictures, one 5½ inches, and the other 7 from the mouth of the urethra.

June 16th.—On examination, I find that the first stricture is cartilaginous, and at least an inch long. The second is longer, and in the membranous portion of the passage. Two incisions were made to-day; one at 12½ o'clock, and the other at 3½ P. M. The instrument advanced more than a quarter of an inch; the stricture, after the incision, was distinctly felt to give way before the point of the instrument.

17th.—Two incisions have been made to-day; one at 9, and the second at 3 o'clock. Mr. B. says that no blood followed the first incision yesterday, and only a few drops after the second. That the stream of urine is much freer and larger. This morning's operation excited a little pain, and produced a little blood. The afternoon's incision was followed by about fifteen drops of blood, but very little pain, and an advance of the instrument of about one inch.

18th.—One incision—a few drops of blood—no pain.

20th.—The bougie passes one and a half inch further. The first stricture is fully divided and passed. Some soreness, and a little pus—to apply cold water to the perineum, and take a dose of salts. *A good stream of urine.*

22d.—Quite comfortable; no discharge of blood or pus; continual rest and low diet.

26th.—Made an incision, and gained an advance of one-quarter of an inch on the last.

27th.—Advanced another quarter of an inch after an incision.

28th.—Made another incision, which was repeated on the 29th and 30th, when the passage was clear to the mouth of the bladder—no difficulty in inducing an ordinary sized catheter.

Having left Geneva the next day, I became anxious t hear from my patient, but did not until one day last week—November 23d. The treatment was successful, and a gentleman from a neighboring district, who has suffered from the disease about three years, has just been treated in the same way, and discharged. The gentleman came to Philadelphia to consult me.

Nov. 19*th*, 1849.—Mr. P., aged 23. This stricture was passable with a small conical bougie, and was located a little beyond the curve of the urethra. An incision was made, and a free cathartic recommended.

20*th*.—A little soreness on passing a small metallic sound at the point where the incision was made.

21*st*.—An incision made; the instrument advancing about half an inch beyond the first point.

22*d*.—No incision—thinks the urine flows better than it has for years.

23*d*.—Cut gained an inch. The operation was repeated on the 24th and 25th, when the passage was perfectly clear. (A large sized metallic cathether passes readily to the bladder. The patient remained a few days longer, taking cathartics several times during the treatment, and living on a vegetable diet. He was perfectly relieved, and I hope cured.

CASE 3.—Mr. I., from Georgia, æt. 35, with a stricture of nine years' standing, having used bougies and caustic again and again, came to consult me. The first incision was made October 22d, and repeated five times, the instrument each time advancing from one-eighth to a quarter of an inch.

No other treatment was resorted to. Only a few drops of blood were lost and the stream of urine was restored to its natural size. A full sized bougie can be introduced with the greatest facility. The particulars of this case are so much like those of the first, that it is needless to repeat them.

It will be remembered that Civiale has adopted the cutting mode of treating stricture, but that a fatal objection lies against his instrument, inasmuch as, like those of Amusat and Lallemand, it must *pass the stricture* before it can be made to operate, and then only *scarifies*. He tells us that he has long been in the habit of cutting through strictures near the mouth of the urethra, and that now he cuts them beyond the curve. Mercier's ideas, in our opinion, are the nearest cor-

rect: viz., that the stricture must be *entirely* divided, in each direction.

I think that the use of bougies and dilators of any kind are prejudicial, and tend to develop strictures rather than cure them. I recommend no dilatation after cutting, but rely upon the urine itself keeping the incisions open, and the sides of the stricture from adhering.

ART. VIII.—*Remarks on Epidemic Dysentery.* By A. WILLARD, M. D., Greene, N. Y.

To the Editor of the New-York Journal of Medicine.

In the Annalist of January 1st, is a paper on epidemic dysentery as it appeared in this place in the Summer of last year, and I now take the liberty to send you some further remarks upon the same disease, in continuation of that paper.

There were several anomalous cases occurring which were not dysenteric, but which have, nevertheless, in their composition, so much of the character of the prevailing epidemic as to show distinctly that they were modified, more or less, by the same intangible morbific influence which seemed to pervade the whole community.

Perhaps the easiest and best way to get at an understanding of these cases is to relate some two or three of them in as short terms as may be.

Mr. O., a gentlemen of delicate health, from pulmonary irritation, sedentary habits, and temperate in everything, between fifty and sixty years of age, had the premonitory, feculent diarrhœa for a few days, but not so severely as to call his attention particularly to the subject. He was taken one morning, with a very great degree of prostration, the evacuations changed from a feculent to a reddish color, and became exceedingly offensive, but they did not occur oftener than from two to four times a day. There was no pain of consequence, the stomach was exceedingly irritable and refused to retain the mildest articles of nourishment, except in very minute quantities; the pulse was weak and feeble and the face pale.

Now, in this case there was a degree of hemorrhage, small in quantity undoubtedly, asthenic in its character, and extremely prostrating in its effects.

Recourse was had to alternate doses of acetated tincture of opium and chloride of soda, and such quantities of chicken or beef tea as the stomach

would retain, which was not more, for some days, than a teaspoonful at a time. Under this course he gradually recovered his previous state of health.

Shortly after Mr. O. was taken sick, Mrs. O. was suddenly seized while about her ordinary domestic concerns, with a sensation of utter and entire prostration. Mrs. O. was a woman of pretty firm constitution, and ordinarily enjoyed good health. Previously to this attack she had had no diarrhœa, and no disturbances of any description about the first passages, but on its access she had one alvine evacuation of a fluid character, which was followed by this sense of prostration. It was the only one she had, unless procured by means of laxatives; but still the prostration continued, and she was even unable to be raised in the bed without a sensation of faintness; her pulse was weak and forceless; she had no pain, and no febrile symptoms. She was treated with opium and brandy, and recovered in a few days.

The next case I shall mention, was one of pure dysentery, but singular in its progress and symptoms.

A fine, active, healthy little boy, of five years old, went to bed in perfect health, and arose in the morning apparently well, but soon after had a bloody evacuation; he complained of no pain, nor any other uncomfortable feeling. The evacuations, however, continued of the same character, and became more and more frequent, at last occurring as often as every ten or fifteen minutes. His strength soon began to fail; the bloody evacuations continued for about five days, after which they gradually took on that fetid cadaverous odor which was in all cases the sure precursor of death, and after about five days more he died.

Through the whole course of the disease he did not complain of pain, or soreness of the abdomen, or nausea, or any other of the symptoms which were usually present; in short, there were no symptoms except the dysenteric discharges and the attendant prostration.

Many other anomalous cases presented themselves, but those already narrated are sufficient to show the general tendency of the epidemic.

The sequelæ of the disease were in many instances of an unpleasant character, but I believe, except in cases where probably extensive ulceration of the mucous membrane of the bowels took place, all terminated eventually in health.

It often occurred that the severe griping pains did not subside with the subsidence of the disease, so that it was frequently remarked, (Hibernice,) that "the patients got well without getting any better." In these cases the frequency of the evacuations became gradually less;

the tenderness of the abdomen subsided, the appetite returned, the stools resumed a natural appearance; the patients regained, in some degree, their strength, and still the pains were excruciatingly severe. One of the worst cases of this sort was relieved by a few small doses of ferruginated blue pill, others by opiates. In these cases there was no very certain evidence of an ulcerated state of the mucous membrane. In other cases evidence of ulceration was quite distinct and prominent. Some of these cases were treated with a combination of the tinctures of creosote and laudanum, others with a solution of strychnine, and sometimes recourse was had to counter-irritation. I think the solution of strychnine was rather the most effectual in most cases.

Another form of termination, or rather sequel to the disease, was in pains of a neuralgic character. Perhaps this would be better defined by calling it a neuralgic rheumatism. After the patient had apparently recovered from the effects of the disease, and seemed to be in point of fact, approaching his ordinary state of health, he would be suddenly seized with pains in the limbs, along the course of the muscles, and in the joints, both large and small. These pains were generally more severe in the night. There was no particular swelling, nor fulness in the pained parts, but the lameness was quite troublesome. The stomach and bowels were not particularly disordered, and the appetite remained very tolerable. This state of affairs was met by opiates and tincture of colchicum, and under such treatment, the patient gradually and permanently recovered.

These are some of the most prominent of the anomalies and sequelæ of the disease as it appeared among us last summer and fall.

This present season, an epidemic dysentery has again made its appearance, and still continues its ravages, though with decreasing severity. It is a little singular, perhaps, that those places which were most severely visited by the epidemic of last year, have been comparatively free from it the present season. The cause of this, I leave others to discover. The Chenango Valley, for instance, in which it displayed its worst features last year, has been this summer comparatively healthy, while some parts of the Valley of the Otselic, which is only a few miles west of this, have suffered to an extent which almost puts the cholera to the blush. On the hills too, which last year were for the most part free from the disease, it has appeared in a form extremely unmanageable and fatal. The disease, during the present season, has, in many respects, an entirely different character from that of the previous year. It is undoubtedly the case, that there is more or less of the cholera influence attending it. Last year there was a

great degree of tendency to prostration—this year, that tendency is far greater. The character of the evacuations is widely different. Last year, they were in appearance coagulable lymph mixed with blood—now, they are more generally bloody mucus—in many cases there is a decidedly hemorrhagic tendency, and frequently the discharges of blood are pretty copious. As was the case last year, the disease is preceded, in a majority of cases, by diarrhœa generally, but not always unattended with pain. There is now also, in many cases, a strong tendency to inflammation of the whole mucous membrane of the first passages, and more particularly of the stomach. I do not speak very advisedly on this point, as I have had no opportunity for post-mortem examination; but it is indicated by a very red, and somewhat dry state of the tongue, tenderness of the epigastrium, and an extreme loathing of food. This state comes on generally, not always, after the disease has lasted for some days, and renders convalescence very tedious and unsatisfactory.

The treatment which seems to be most efficient in the present epidemic is a good deal different from that of last year. I speak now of our own locality, for I am aware that in other places, the course pursued has been far different from that which we have found to answer the best purpose here.

If a cathartic be administered during the premonitory diarrhœa, the consequence in a majority of cases is the immediate accession of bloody stools, with the ordinary accompaniments of severe griping pains, tenesmus, &c., and if given during the first few days of the disease, it is invariably rendered altogether more unmanageable and severe. If laxatives are used at all, we employ only the mildest kind, such as calcined magnesia and the like. Perhaps a mild alterative course, consisting of minute doses of hyd. c. creta, is in some cases beneficial. But the remedy which is most to be relied on, and which almost always puts a stop to the premonitory diarrhœa, and frequently to the fully formed disease, is opium in some form, combined with a stimulant—such as laudanum combined with camphor and essence of peppermint, or compound tincture of lavender. A very excellent formula is one mentioned by Dr. Page, of Louisiana, in a paper on the cholera, inserted in the Boston Medical and Surgical Journal of July 4th, 1849. It consists of two parts each, spirits of camphor and compound tincture of lavender, and one part each of acetated tincture of opium and Hoffman's anodyne liquor. Opiate enemas and compresses to the anus wet with tincture of cicuta or laudanum, or laudanum and a solution of sugar of lead, are in many instances beneficial, and add greatly to the comfort of the patient.

I do not mean to be understood that this plan of treatment will apply universally, but only that it answers the purpose tolerably well in this locality.

I will add only a few desultory remarks to this already extremely unmethodical epistle. Almost every writer upon dysentery, in giving his views on the subject, edifies us with a long theoretical prelude wherein one arrives at one conclusion and another at another. One gravely informs us that the whole disease depends upon the presence of scybalæ, and accordingly recommends the free use of cathartics as the only true course for the salvation of the patient. This doctrine, by the way, is rather of ancient date, and does not apply particularly well to the disease as it appears in these our days, but there is no reason to doubt, I imagine, that an epidemic dysentery may have occurred in which this state of affairs was a particular characteristic of the disease. Another bases his treatment upon acute inflammation, and of course advises venesection and antiphlogistics to the full extent. Another talks about diseased secretions from the bowels as the sole cause, and they of course must be got rid of by means of laxatives and cathartics. Another makes a sort of compound of inflammation and irritation, which must be remedied by means of narcotics and sundry other anti-irritants; and another still, lays the whole cause of the disease to the charge of that everlasting scape-goat, the liver, and he of course drenches his patients with untold quantities of mercurials. May it not be questioned whether the disordered functions of the liver are not rather a *consequence* than a cause of the disease? Are not those functions well and properly performed until the accession of that specific inflammation which constitutes the disease, and do they ever become normal until after that inflammation is arrested?

One practitioner lauds cream of tartar as "the sovereignest thing on earth;" another praises astringents with equal manifestations of confidence; another relies upon diacetate of lead as worthy of all confidence, and another still recommends nitrate of silver as almost a specific, and so on "to the end of the chapter."

All these causes may at times be true, and at other times false; and each of these different modes of treatment may at times be effectual, and at other times not one among them will prove curative.

Now we infer from all this, that dysentery is an exceedingly variable disease—that one epidemic assumes one form, and that another is of an entirely different character; in short, that every succeeding epidemic has its own peculiar modifications, and requires that the treatment should be modified accordingly.

It follows then necessarily, that instead of being bound to pursue any particular mode of treatment because we have dysentery to deal with, and because this writer or that tells us that some particular course is the true one, we must be guided altogether by circumstances, studying the particular form of the disease in all its bearings—its character, as sporadic or epidemic—as acute or typhoid—as modified by climate, by season, by locality, and giving at the same time very particular attention to the epidemic constitution of the year.

Guided by these circumstances, together with others which will suggest themselves to every practitioner, we may be enabled to select from all the multiplicity of differing and conflicting modes of procedure which have been recommended, some one which may suit the character of the prevailing epidemic, and enable us to meet it with some degree of success.

PART SECOND.

CRITICAL ANALYSIS.

ART. IX.—*A Theoretical and Practical Treatise on Human Parturition.* By H. MILLER M. D., Professor of Obstetrics, etc., in the University of Louisville. Louisville: J. V. Cowling & Geo. C. Davis. 1849. 8vo. pp. 447.

Parturition, and the Principles and Practice of Obstetrics. By W. TYLER SMITH, M. D., London. Lecturer on Obstetrics in the Hunterian School of Medicine. Philadelphia: Lea & Blanchard. 1849. 12mo. pp. 396.

WE have grouped together these two works on obstetrics more for contrast than comparison; for in very truth, except that they are upon the same subject, they have scarce a single feature in common. One comes to us from abroad, from that great mother country to which our obligations are so infinite, from the metropolis of England, from one of the great centres of civilization. The other is from the Great West, from a city, the site of which, within the memory of men not yet passed middle life, was a mere wilderness. If thus different in their "*habitat*," our authors are not less dissimilar in their aims and pretensions. The one makes large claims to philosophical merit, speaks as one having authority upon physiology, psychology, the excito-motory powers, etc., etc. The other is a plain backwoodsman, and glories in being one; he is anxious to aid his brethren in performing the active professional duties which press upon them in this our utilitarian age, and in our working-day part of the world. It is obvious that these books must be spoken of apart. First, then, of our countryman, Yes, first of our countryman, for we are not of the number of those who believe that science like wine, improves by a sea voyage; on the contrary, we hold that upon every branch of the practice of medicine, surgery and obstetrics, the best book for American practitioners is one written by

an American. Therefore, the first place to our countryman, Dr. Miller.

The very first line of his preface smacks of the Great West in general and of old Kentuck in particular; that our readers may at once have a taste of his quality, we will extract the passage.

"A MAN, in becoming an author, may be permitted to hold a free and easy colloquy with his reader, without justly exposing himself to the charge of egotism, even should he speak of himself, his plans, hopes and expectations more than is seemly in other situations. No one writes without presuming that he is able to teach; and the success of his undertaking depends very much, on establishing at the onset a degree of familiarity between himself and his reader, on the same principle that the school-master relaxes his magisterial brow, and playfully receives the little urchins at their first meeting, not forgetting to pat their ruby cheeks and tell them something about himself."

The doctor now tells us something ("something too much"?) of himself, and then goes on to state the objects of his work as: 1st. "To give a full, correct and lucid description of the mechanism of labor." 2d. "To review the whole subject of presentations and positions with the light which his own experience and that of others has thrown upon it, and establish for them a classification and nomenclature which he thinks all may adopt." "His aim is no lower." Let us see how nearly he comes to the mark. His first chapter is on the obstetric properties of the pelvis. His descriptions are brief but clear, and his views of such controverted topics as arise, especially as to the place of the inferior strait (in which he favors the notion of Dugès, that the plane should be divided into an anterior or vulval and a posterior or cocco-perineal space,) and the axis of the pelvic cavity, (where he follows Cazeau,) are judicious, and expressed with a calm confidence in himself, and a disregard of "those great English authorities" by which our countrymen are so frequently enslaved, creditable to him as an independent thinker. Next comes an account of the obstetric *aptitudes* of the fœtus. This too, is a good chapter. In chap. 3d the annexes of the fœtus is treated of under the *Milleric* designation of "the appurtenances of the fœtus." This account of the structure of the placenta is taken bodily from Willis' Translation of Wagner, and duly credited to Braithwait's Retrospect, Part xii. p. 320, where Dr. Miller found it. This is honest, and contrasts very favorably with the jumble which is made in some of our treatises on physiology and obstetrics, where physiologists of the Peter Parley school attempt to disguise, and only succeed in disfiguring what they do not understand. We concur in the truth of Dr. Miller's comment on this account of the structure of the placenta; "then," says he, "it is anatomically different from that

of Hunter, it is not practically or physiologically different." His remarks on fœtal nutrition are too positive for a subject on which, as he confesses, "we have no positive proof." The negative evidence is not "altogether satisfactory" to others, though it may be to Dr. M. We are surprised to find Dr. Miller expressing a doubt whether knots in the cord can cause death; we have seen a cord where the vessels were by this knotting reduced to less than one third their normal size. The cause that had produced this diminution, might surely, if continued, effect entire obliteration.

But we are warned by the amount of material still before us to hurry forward. Chapter IV. treats of the uterus as an organ destined to expel the fœtus. This chapter pleases us less than the preceding. Then we enter upon the subject of labor. 1st. Its efficient causes. 2d. Exciting causes. As to the former, Dr. Miller's notion is thus expressed: "Labor is a contest between the body and the neck (of the uterus;) the former endeavoring to expel, the latter to retain the fœtus." Surely a notion like this, is scarce important enough to justify the devoting of fifteen octavo pages to its development!

So of the exciting cause of labor, rejecting the pious physiology of old Avicenna, that "at the fitting time, labor takes place by the will of God." Dr. M. speculates and reasons on this matter through nearly twenty pages, finally adopting the theory of Dr. Power, *orificial irritation.* Having waded through these, far the least able and least interesting portions of Dr. M.'s book, we come upon a sensible and accurate description of the phenomena of the first stage of labor, and a few very judicious rules for the conduct of the case. Then we have the phenomena of the second stage and rules for that portion of labor; to which is added, a chapter on what Dr. M. not very happily calls "impotent action of the uterus," meaning inertia from exhaustion, though here too we have to complain of a disposition to waste time in speculations as to the exact state of the uterine fibre, circulation, &c.

But we must pass on, Dr. M. adopts the presentations, &c., of his favorite Dugès, and argues *lengthily* upon the advantages of this arrangement. It suits him, at any rate, and nearly all of the remainder of the volume is taken up with descriptions of the mechanism of the different positions and presentations. This part of the work is very elaborately and very ably written. It is not till we reach the 400th page, that we come to the third stage of labor, and here we reap the fruits of the long speculative discussions by which the earlier pages are filled—the important subjects of asphyxia neonatorum, retained pla-

centa and uterine hemorrhage, are all crowded into one chapter—nor can we at all agree with Dr. M. in his treatment of the latter most dangerous complication of labor. He speaks of frictions, pressure and cold, as means of little value, says ergot will do very well, "if we put no trust in it," but "the hand—the hand carried into the uterus to press upon its internal surface, aided by counter pressure from without"—this is "the main chance." Here we are at issue with Dr. M. We believe that such introduction of the hand to press upon the internal surface of the uterus, will often do harm, and still oftener fail to do good; and on the other hand, we have never yet met a case where the cold dash—not water poured from a tea-pot, as Dr. M. proposes, but water dashed on by the pint and quart would not excite contraction—often and often have we felt the uterine tumor harden under our hand, and never have we ventured to introduce the hand, either to remove the placenta, or to excite uterine contraction, before we felt the hard uterine tumor, that we have not regretted it—for years, we have abandoned it altogether.

With these remarks, we leave Dr. M. He has made a good book, one which compares very favorably with works of larger size and greater pretension; but when it reaches a second edition, we hope some of the speculations will be cut out, and practical matter put in. The book is well published; printing good; (though the errata is too large,) paper excellent; altogether, it is a very favorable specimen of "book-making at the West."

We now turn to Dr. Tyler Smith. His work, like so many recent English medical publications, first appeared in fragments in one of the journals. It is put in the form of lectures, which fill a duodecimo of about four hundred pages.

The first observation we are tempted to make, is, that Dr. S. holds an enviably high place in his own good opinion. His statements of his own claims, and his mode of dealing with those that differ from him, all show this. Our next generality is, that Dr. S. writes his own language with a degree of inaccuracy which really amazes us, coming from a London teacher. Such atrocities as the following can be picked out of almost every page: "for the sake of invidiousness," meaning invidiously "the parts of the child conduct themselves," meaning—we know not what.

The leading idea of Dr. T. Smith's book is the application of the doctrine of reflex function to labor. To preach and teach "*reflex obstetrics*" is evidently his mission, his speciality, or to drop these new-fangled terms, and resort to an old-fashioned phrase, his *hobby*.

Before we attempt to follow the track of this high-mettled steed, we have a word to say about Dr. S.'s introductory. The object of this lecture is to compare British and continental obstetric medicine, and also "to explain some of the perturbations which have recently crept into the British school." These creeping perturbations, as afterwards appears, are the innovations of Professor Simpson, innovations which have greatly disturbed the peace of certain of the London teachers. The tone in which the comparison between British and continental midwifery is made, is eminently English. It runs on pretty much after the following fashion:—*axiom*, the state of the obstetric art, may be taken as a standard of civilization. *Postulate*—"there is no branch of medicine which more commends itself to the genius of the English people than obstetrics." Inference—civilization has reached its acme in England. *q. e. d.*

Dr. S., as we have before stated, believes that his mission is to preach the reflex function, and accordingly he does preach it with abundant zeal and superabundant confidence. He accepts, as literal truth, the declaration of Marshall Hall, that "the whole question of obstetric science is one of the true spinal system." To unfold and establish this a axiom is the object of Dr. Smith's book. But a very cursory examination of it will, we think, satisfy any one who is fully imbued with the modern spirit of accurate research, that however great the importance of the reflex function may be, and however close its connexion with obstetrics may hereafter be proved, Dr. Smith has not and will not demonstrate the one proposition or the other. He is zealous, eager, impatient of opposition, confident in himself—but in his eager and impatient zeal he forgets that in science a man's value depends—to use acelebrated phrase of Johnson's—not upon what we shall *say*, but upon what we shall *prove*. We find in every lecture many things confidently asserted which *may* be true, but they may not. Meanwhile they are unproven, for example, on page 48, we are told that "in parturition, physical pain and the resultant emotions play important parts, aiding *most emphatically*, when not excessive, all the motor actions of dilatation and contraction." Now this, though so confidently asserted is, as every physiologist knows, utterly without any foundation in observation or experiment—it is a mere rash assertion. On the very same page we are told that "the maternal emotion excited by the sight of the infant causes the uterus to contract in a very remarkable manner." In Lecture 5th we have a vehement assertion of Dr. R. Lee's claims to have discovered nerves in the gravid uterus. Here, as in

the case of the influence of the reflex function on labor, a good cause is injured by a bad advocate. That the amount of the nervous tissue should augment as the uterus generally increases in size with the progress of gestation, is in itself probable, and Dr. Lee deserves credit for directing the attention of physiologists strongly to this matter, but does Dr. Smith imagine that his friend's cause is helped by such reasoning(?) as he employs in the following passage, "The opponents of Dr. Lee confidently appeal to the microscope to prove the justness of their rejection of his labors, but the fact of such an appeal shows a prejudice against him, and a willingness to deny the fidelity of his dissections. The microscope is used to ascertain the intimate physical appearance of nervous and other tissues, but hardly, on ordinary occasions, to distinguish grossly between nerve, muscle, and cellular tissue. It must be borne in mind that the nerves of the body generally were dissected and held to be nerves upon other evidence than such as that furnished by the microscope long before this valuable instrument was invented. If, in the case of uterine nerves, we deny that the tracing of the scalpel or dissecting needle, continuity with other nervous structures, and careful ocular examination—for the debatable structures are quite large enough to be inspected by light and touch,—if, I say, these are not sufficient to help us to a decision in the case of the uterine nerves, neurological anatomy should begin again, and we ought to question the reality of every nerve in the body; for they hold their title to be considered nerves only on evidence, which, if applied to uterine nerves, answers directly in the affirmative." We do not believe that a more absurd passage than this could be found in any English physiologist of the present century. The microscope not used to "distinguish grossly as between nerve, muscle and cellular tissue!!" Very true, good Doctor, it is not used to distinguish *grossly*, but to distinguish *accurately*. Next we shall hear that chemical analysis is of no use in distinguishing as between acids, alkalis, salts, &c. No! Dr. Smith would have us rely on "careful ocular examination." It would be a waste of our time and that of our readers to follow such a writer through four hundred pages of rash generalization and confident assertion. Having satisfied ourselves that our guide is not trustworthy, we quit his company without ceremony as without regret. C. R. G.

ART. X.—*Lectures on the Diseases of Infancy and Childhood.* By CHARLES WEST, M. D., Fellow of the Royal College of Physicians, Senior Physician to the Royal Infirmary for Children, etc., etc., etc. Philadelphia: Lea & Blanchard. 1850. 8vo. pp. 451.

[Continued from Vol. 3, page 392.]

As promised in our last number we continue the analysis of Dr. West's work. Lecture XXVII. commences with the diseases of the organs of digestion and assimilation. This lecture is prefaced by a very careful enumeration of the peculiarities of the digestive organs of infancy, in which we find the following facts stated. In the infant the peculiar *form of the digestive* organs, as well as their feeble muscularity, is well marked. The shape of the human stomach too, in the first month of existence, is widely different from that of the adult. It is long, but little curved, growing narrower toward either end, where it passes into the œsophagus on the one hand and into the intestine on the other. Its small curvature is but little arched, and its large curvature but slightly developed, running almost parallel with the other; characteristics which are all found in the stomach of carniverous animals. No comparison is necessary to show that these conditions widely differ from those of the adult. The result of all this is, that the stomach of the infant is ill suited to retain matters long within it, and its small size unfits it for receiving much at once. If, therefore, the food given to an infant be such that it can digest with facility, it soon passes out of the stomach, and the infant speedily seeks for more. These arrangements, calculated for the rapid digestion of easily assimilated food, are not confined alone to the stomach, but the form and proportions of the intestines correspond thereto; these conditions, together with the fact that the peristaltic action of the bowels is more rapid than in adult life, Dr. West thinks causes the excrementitious matter to be more quickly expelled and the healthy infant to pass three or four evacuations in the twenty-four hours. All these peculiarities of development point to the *mother's milk as the proper aliment of the young.* How small must be the effort needed to effect the assimilation of this fluid? By degrees the stomach alters in form, its muscularity increases, the powers of the digestive organs become greater, and the child becomes able to derive support from food in which the nutritive principles are not presented in so simple a form as in the milk.

While discussing the important subject of the best substitute for the mother's milk in those cases where the mother refuses to perform to-

wards it a mother's part, or where by accident, disease or death the infant is deprived of the food which nature destined for it, our author very properly discards all those preparations of arrow-root, flour, or biscuit powder, in which the vulgar repose such confidence, and which the physician is apt, too often, to give countenance to. He gives preference to ass's milk when it can be obtained, "which from the small quantity of casein that it contains, is especially fitted for young or delicate infants." If cow's milk only can be obtained, it should be given in a diluted state at first. This, when healthy, invariably like that of the human female, is alkaline. The milk of the grass-fed cow forms no exception to this rule, "comparatively slight causes, however, exert a marked influence upon the milk of the cow in this respect; and if the animal be shut up and stall-fed, its milk almost constantly acquires a strongly acid property*— a fact which, of itself, is sufficient to account for the symptoms of gastric and intestinal disorder so often produced by it in the case of children brought up in large towns. Whenever, therefore, the attempt is made to rear an infant by hand under circumstances which render it impossible to obtain the milk of cows which are at pasture, it is desirable that the milk should be daily tested, and that any acidity should be neutralized by the addition of lime-water or prepared chalk, in quantity just sufficient to impart to it a slight alkaline reäction. If the bowels be disposed to be constipated, carbonate of magnesia may be substituted for the chalk." Dr. W. believes that there is good reason for believing that the milk of the stall-fed cows often undergoes a deterioration much more serious than the merely becoming acescent; and that changes not unfrequently take place in it such as must render it unfit for an infant's food, and calculated only to promote disease, showing the necessity, when an infant who is brought up by hand fails in health, for making a careful inquiry into the source of the milk with which it is fed; and for examining the fluid, both chemically and under the microscope, before proceeding to prescribe remedies for ailments which may be caused entirely by the unwholesome nature of its food.

Passing by the remarks of our author upon atrophy, dentition and the various forms of stomatitis, as presenting nothing particularly

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* See the results of Dr. Mayer's observations on cows in Berlin and its neighborhood, in a valuable paper on the artificial feeding of infants, in the first volume of the Verhandlungen der Gesellschaft für Geburtshülfe in Berlin, 8vo., p. 56. Berlin, 1846.

new to attract our attention, we proceed to notice some portions of his lectures upon the diseases of the alimentary canal. *Softening of the stomach and intestines* is treated of somewhat at length. It will be remembered that the state of professional opinion is not as yet settled in regard to the pathology of this affection. Pathologists have endeavored to distinguish between two kinds of softening of these organs, one of which they regard as a post-mortem occurrence, the other the result of disease. Softening of the stomach in infancy is believed by Rokitansky to be of the latter kind.

It varies in degree from a slight diminution in the consistency of the mucous membrane, to a state of complete diffluence of all the tissues of the organ, in which it breaks down under the finger on the slightest touch, or even gives way of its own accord, and allows of the escape of its contents into the abdomen. When the change is not far advanced, the exterior of the stomach presents a perfectly natural appearance, but on laying it open, a colorless or slightly brownish, tenacious mucus, like the mucilage of quince seeds, is found closely adhering to its interior, over a more or less considerable space at the great end of the organ, and extending along the edges of the rugæ. This mucus is easily washed away, and the muscular coat of the stomach in those parts to which it had adhered is then left almost or altogether bare, and denuded of its mucous membrane. When the change has gone further, the stomach at its great end presents a semi-transparent appearance, though not uniformly so, but in streaks running in the direction of the rugæ; the destruction of the tissues having in those situations reached deeper than elsewhere, and involved a portion of the muscular as well as the mucous coat of the organ. If roughly handled, the stomach in many cases gives way, an irregular rent taking place at its great end, where the coats of the organ are found to be soft and pulpy, and to break down easily under the finger. In the next degree, the coats of the stomach are found to have been already dissolved in some parts, so that the contents of the organ have escaped into the abdominal cavity. The whole of the great end of the stomach, and a considerable extent of its posterior wall, are now reduced to a gelatinous condition, in which no distinction of tissues is apparent; and the parts thus altered are either transparent and colorless, or else of a pale, rose-red hue. The interior of the organ sometimes presents a similar tinge, even beyond the limits to which the softening of its tissue has extended. This, however, is by no means constantly observed, while in no case is there any injection of the vessels of the stomach, or any evidence of its having been the seat of real inflammatory action. The opaque and brownish appearance of the tissues—characteristic of pulpy softening—is but seldom met with in infancy.

The fact that softening of the stomach occurs more frequently in the adult and in persons who have died with certain diseases, than in those

who have died from others, has lead some to believe that, in the former case, a diseased and superabundant secretion of gastric juice, during the life of the individual had caused the softening of the stomach after death. Upon this point and also the theory of Dr. Elsässer, Dr. W. remarks:

The same hypothesis has been applied to account for its peculiar frequency in infancy, since at no period of life is gastric disorder so common as then. Some writers have advanced still further, and have endeavored to connect the existence of a softened state of the stomach after death, with certain well-marked symptoms of disorder of its functions. For my own part, however, I have not been able to discover any peculiarity in the character of such symptoms, nor even any constancy in their occurrence; nor have I observed that the disease of which the infant died has exercised any appreciable influence in predisposing to softening of the stomach, or in preventing its occurrence.

It would, perhaps, not be right to pass wholly unnoticed the theory of the cause of softening of the stomach, recently propounded by Dr. Elsässer. He refers the alteration of the tissues, not to the gastric juice itself, but to the acids generated during the decomposition of the food contained within the stomach and intestines at the time of death; and endeavors to account for the frequency of the occurrence in the case of infants, from the facility with which a free acid is generated in the milk, which forms a chief part of their sustenance. According to his researches, which appear to have been carefully conducted, the change never ought to take place when the stomach is empty; but his assertion that it never does, is opposed to universal experience. Though by no means true to their full extent, there is yet probably a considerable measure of truth in Dr. Elsässer's opinions.

Following the notice which our author takes of softening of the stomach and intestines, are some observations on the vomiting of blood in infants. This is an exceedingly rare affection, sufficiently so at least that it may with truth be said that its rarity prevents any one person from possessing what may be called real practical experience in it. The notice which Dr. W. takes of it will, however, repay the reader if he gives it a careful perusal. In most cases, remarks Dr. W., "the hæmatemesis has not recurred above two or three times in any quantity; and the children, though at first very much exhausted by the loss of blood, have eventually recovered. When death has taken place, the liver and the abdominal veins have sometimes been found gorged with blood, and blood has been found within the intestines, or extravasated between their coats, constituting what has been termed abdominal apoplexy; appearances which have been supposed to indicate that some impediment to the establishment of the new course of the circulation which the blood should follow after birth, has given rise to the accident.

In one of two instances of this accident that came under my notice, the cause of the occurrence was very obscure; in the other, the vomiting of blood was accompanied with many indications of hepatic disorder." In treating of the diseases of the urinary organs, we find the following remarks in reference to a disease of at least occasional occurrence in this country. The great and permanent increase (in the generally profuse flow of urine in the young subject,) when associated with certain changes in the composition of the fluid and the presence of saccharine matters among its elements, constitutes *diabetes.* Upon this disease our author thus speaks:

My experience concerning these affections amounts, in short, to this—that whenever the processes of digestion and assimilation are seriously disturbed for any considerable time in early life, the functions of the kidneys are very apt to become excessive in degree as well as disordered in kind. Further, such disorder is especially likely to occur just at that period when the simple but highly animalized food of the suckling is exchanged for the more varied diet of the infant after weaning. And, lastly, its existence may be suspected, whenever, coupled with more or less marked indications of gastro-intestinal disorder, there is a rapidly increasing emaciation, for which no adequate cause appears. It will, however, often happen, even when the amount of urine greatly exceeds the healthy average, that the parents of an infant take no notice of the circumstance, imagining it to be either an accidental and unimportant occurrence, or accounting for it as the natural result of the thirst, which induces the child to drink very abundantly. Hence, unless you make special inquiries with reference to this point, you may remain in ignorance of a very important symptom.

When once you have become aware of the existence of this affection, its *treatment* is attended by no particular difficulty, and, if undertaken sufficiently early, will often prove successful. The state of the bowels requires most careful attention: mild alteratives are frequently serviceable, but drastic purgatives are very unsuitable. The hydr. c. cretâ, in combination with Dover's powder, is often very useful in promoting a healthy condition of the evacuations; while the Dover's powder alone is also beneficial in calming the child's excessive irritability, as well as in diminishing the amount of urine secreted. Dr. Prout adds a caution, however, with reference to the use of opiates in these cases, as well as to the sudden withdrawal of fluids, since a suppression of urine may follow the incautious adoption of these measures, and that condition is almost sure to end in coma and death. Change of air to a dry and temperate situation, especially on the sea-coast, is of much importance, and the tepid of warm sea-water bath is often beneficial; while tonics of various kinds are generally of service. The different preparations of iron appear to have advantages over other medicines; and Dr. Venables, who was the first to call the attention of the profession to this affection, bestows high commendation on the phosphate of iron. Dr. Prout insists, moreover, on the importance of a suitable diet,

into which albuminous matters should enter freely, in preference, though not to the entire exclusion, of those which contain gelatine. Milk should form a chief element in the diet; while of farinaceous matters, those are to be preferred which have not undergone the fermentative process. These precautions, too, must be observed, not for a short period only, but until the child has for some time regained its health, since a slight error is very likely to be followed by a serious relapse."

On the subject of incontinence of urine, Dr. W. adds nothing to our present knowledge. His observations on abdominal tumors are important, and deserving of the reader's more than ordinary attention. He has once seen the liver in a child the seat of malignant disease. It was of the ungoid kind. The patient was a little boy, eight months old, when the first symptoms of disordered health commenced. "The child lived to the age of one year; and for the last six weeks of his life, during which time I had the opportunity of watching him, he suffered from diarrhœa, which was occasionally very profuse. He became extremely emaciated, and his skin assumed an exceedingly sallow color; but the evacuations, though relaxed, were otherwise natural. No hemorrhage took place from the intestines, and the urine was found to be perfectly natural whenever it was tested. During the last month of his life, he had a slight cough and wheezing respiration; but death seemed due to the constant diarrhœa and the severe pain which the child suffered; his exhaustion being, doubtless, in a great measure, the consequence of the blood, which should have nourished his body, being diverted to supply the enormous mass of fungoid disease of the liver. During the six weeks that the child was under my observation, his abdomen increased from twenty-one to twenty-five inches in circumference, and the tumor, the surface of which was uneven, was always much larger on the left than on the right side. It turned out, however, on an examination after death, that the left lobe of the liver was almost completely healthy, but that it had been driven up under the ribs by the enlarged right lobe: that part of the organ was converted into a soft, white, brain-like matter, intermingled with which were portions of a firmer, highly vascular, fibro-cellular substance. The disease in short, consisted of a mixture of carcinoma medullare, and carcinoma fasciculatum. A few deposits of medullary cancer, one of them as big as a walnut, existed also in the right lung, but the other viscera were healthy."

He has met with malignant disease of the kidney in two instances in children. The first in a boy aged two years and ten months, and the second in a girl aged fourteen months. "In the former case, at

the same time that the child became languid and fretful, his abdomen was observed to be enlarging. For a few days in the early part of his illness, he was reported to have passed bloody urine; but this symptom did not recur during the subsequent progress of the disease. In proportion as his abdomen increased in size, he became more and more emaciated: he had occasional attacks of diarrhœa, but nevertheless his appetite continued craving; and it was not till ten months after the first symptom had been noticed that the child died, exhausted. In the case of the girl, the disease ran a much more rapid course, and death took place in ten weeks from the appearance of the first symptom. She was attacked with feverishness, gastric disorder, and occasional vomiting, which had not continued more than a week when her mother noticed a tumor in the abdomen. When these symptoms came on, the child was well nourished, but she lost flesh rapidly in proportion as her abdomen increased in size; her evacuations were often very unnatural, but at no time was there either diarrhœa or hæmaturia. Towards the end of her life she became very fretful, and seemed occasionally to suffer severe pain in the abdomen; but her death took place suddenly, and without any sign of her health being worse than it had appeared to be for some days before. In one case, the left, in the other, the right kidney, was the seat of the disease: the local symptoms were very similar in both instances, and consisted in the presence of a solid tumor occupying the lumbar region, and extending from the spine across the abdomen towards the opposite side, and reaching upwards beneath the ribs, and downwards towards, and in the first case even into, the pelvis. On examining the body after death, the nature of the disease was seen in both instances to be precisely the same, being a mixture of cerebriform matter, and of the peculiar structure of fungus hæmatodes, while in both the kidney was considerably larger than the head of an adult." He speaks also of the enlargement of the spleen, the result of intermittent fever, and mentions a case in which this organ reached from under the ribs down into the pelvis, in a little girl about six years old.

The description and treatment of exanthematous fevers embrace two lectures. In these we see nothing new presented for the consideration of the reader, but like most of the other portions of this volume of Dr. West, the analysis of which we have now brought to a close, we find the evidence of the workings of a careful and observing mind. Should, however, a second edition of this work pass through the press, we would suggest to the author the propriety of preparing an extended "Index," which adds materially to the value of the work for reference for the practising physician.

BIBLIOGRAPHICAL NOTICES.

ART. XI.—*Surgical Anatomy.* By JOSEPH MACLISE, Surgeon. With colored plates. Philadelphia: Lea & Blanchard. Large fol. Part 1. Plates 16. pp. 40.

WE have here presented for our notice, a work which cannot but please the most fastidious lover of surgical science, and we hesitate not to say that if the remaining three numbers of this work are in keeping with the present, it cannot fail to give universal satisfaction. In it, by a succession of plates, are brought to view the relative anatomy of the parts included in the important surgical divisions of the human body, with that fidelity and neatness of touch which is scarcely excelled by nature herself. The part before us differs in many respects from any thing of the kind which we have ever seen before. The success of this work, which we understand in England has surpassed the expectations of its author and publisher, has been owing to this peculiar feature; viz., that of leaving appended to the dissected regions as much of the undissected as was necessary for the explanation of the anatomy arranged beneath. The object, as stated by the author, being to indicate the interior through the superfices, and thereby illustrate the whole living body which concerns surgery, through its dissected counterfeit. This part of the work clearly shows that it has been his intent to base the practical upon the anatomical, and to unite these wherever a common dependence was admissible. To the physician as well as the surgeon away from schools and the opportunity for dissections, this work cannot fail to prove of eminent usefulness. Of the truth of the illustrations therein presented, one who has seen nature has only to look to be satisfied. Never have we seen so much of the anatomical knowledge and patience of the dissector, and the skill of the artist combined in the person of the author of a like production. To each plate is attached a comprehensive commentary explaining all the most important anatomical facts, and showing their surgical and medical applications. It cannot then but be useful for the student both of medicine and surgery. The physician as well as the surgeon will find in these commentaries much to instruct and guide him in the examination of the important cavities of the human body. While we believe that nothing but an extensive circulation can compensate the publishers for the out-

lay in the production of this edition of the work—furnished as it is at a very moderate price, within the reach of *all*—we desire to see it have that circulation which the zeal and peculiar skill of the author, (he being his own draughtsman)—the utility of the work, and the neat style with which it is executed, should demand for it in a liberal profession. The peculiar character of this work of Mr. Maclise renders it next to impossible for us to give our readers a selection from any portion of the commentaries to illustrate the manner of their execution.

ART. XII.—*The Practice of Surgery:* embracing Minor Surgery, and the Application of Dressings, etc., etc., etc. By JOHN HASTINGS, M. D., U. S. N., Fellow of the College of Physicians of Philadelphia, Lecturer on Surgical Anatomy and Operative Surgery, etc., etc., etc. With numerous illustrations. Philadelphia: Lindsay & Blakiston. 1850. 12mo. pp. 479.

THIS volume is one of the series of the "Medical Practitioners' and Student's Library," now in the course of publication by Messrs. Lindsay & Blakiston. It "does not aspire to supplant any of the numerous and able productions which treat fully and minutely of surgical science." It would appear that it is more particularly intended for an introductory survey of the most prominent and distinctive features of the varied field of surgical knowledge. As a *guide* book to the student and young practitioner in this department of medical science, it does not savor of prolixity, and yet it is sufficiently minute to present a practical and general view of the subjects embraced within its scope. That there are works which contain nearly, if not quite all that is presented in the one before us, we have no doubt—but that it is thoroughly adapted to the end for which it was designed, we feel confident all will admit who give it a careful perusal. It presents a careful and sufficiently digested selection, and a clear and exact account of the most important facts and principles already furnished by the ablest observers both at home and abroad. By reference to the volume, we find that the following authors have been fully consulted and used: Sir Astley Cooper, Sir B. Brodie, Messrs. Miller, Druitt, Ferguson, Lawrence; Drs. Gibson, Pancost, Carpenter, Dunglison, Prout, M. M. Velpeau, Malgaigne, Ricord, Sichel, Weller, Rayer, Guthrie, Hennen and others—authorities sufficient, with the careful and attractive manner in which it is executed, to insure for it that success which its intrinsic merit demands.

ART. XIII.—*On the Diseases of Infants and Children.* By FLEETWOOD CHURCHILL, M. D., M. R. I. A., Hon. Fellow of the College of Physicians, Ireland, etc. etc.; author of "The Theory and Practice of Midwifery," "On the Diseases of Females," etc. etc. Philadelphia: Lea & Blanchard. 1850. 8vo. pp. 636.

A Practical Treatise on the Diseases of Children. By D. FRANCIS CONDIE, M. D., etc. etc. Third Edition, Revised and Augmented. Philadelphia: Lea & Blanchard. 1850. 8vo. pp. 703.

IF any evidence were wanted of the fact, that American physicians *read*, farther than that three valuable, and we had almost said, complete systematic works on the diseases of children, have already issued from the press of Messrs. Lea & Blanchard, bearing the date of 1850, it might be found in the preface of the work whose title stands first in this article. It is notorious that American physicians read English works more than Englishmen read them themselves; and yet, we hear constantly of the retrograde march of medical intelligence and the low state of medical science in this country. The fact is, (at least so it appears to us,) that while we, as a profession, for a number of years past, have used, and are still using, all the means that we are masters of for the purpose of increasing the standard of medical education; we have almost lost sight of the pleasing, consoling and honorable fact, that a greater amount of intellectual and literary taste (medical) exists in this country than is found in any other. Whilst the writings of foreign authors are comparitively but little read, even by their own countrymen, and those of American almost never, our own physicians possess, in reference to this matter, to say the least, almost an omniverous habit.

By reference to the preface of Dr. Churchill's book, we learn that it "owes its existence to my excellent American publishers," and that after making a considerable collection of works on Diseases of Children, he had laid them aside, hopeless of accomplishing the task he had contemplated; but the flattering invitation from the country that had shown to his former works so much indulgence, rendered it impossible for him to decline. This work, it appears, is the result of the author's leisure which he has been able to command during the last three years, and lays claims to be, not only the exponent of its author's own experience, but also embraces the information recorded by all the authors within his reach. It bears upon the face of its pages much more candor than

is usually seen in foreign or even American works. As will be seen by reference to the extensive bibliographical index appended to the volume, it draws largely upon our own countrymen's productions. More so in fact, than we remember ever to have seen in any, much less a similar production. "I have (says he) sought information wherever I had reason to believe it was to be found; I have consulted all the authorities within my reach, and have carefully referred to those from whom I have quoted." Thus it will be seen, that while there is no claim set forth to exclusive originality, yet we have presented a work which, so far as it relates to the opinions of past or present writers on the diseases of infants and children, is certainly worthy of a place on the table of every practical physician. We need hardly say, that this production of Dr. Churchill, must, in our opinion, meet with a very favorable reception from the hands of the physicians of this country. We know of no work in this department of practical medicine, which presents so candid and unprejudiced a statement or posting up of our actual knowledge as this. Most cordially do we welcome it as a valuable contribution to infantile medicine, feeling assured that in a short time, the profession at large will place upon it the stamp of their approbation. We would most gladly reproduce here some of the valuable observations contained in this volume, but our limits at present forbid, however pleasing might be the task to ourselves or desirable the result to our readers.

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The present edition of the work of Dr. Condie, is a decided improvement upon the last. Besides the fact that every portion of it has been subjected to a careful revision, it contains a new chapter on Epidemic Meningitis, "a disease which, although not confined to children, occurs far more frequently in them, than in adults." To this edition also there is appended a list of the several works and essays quoted or referred to in the body of the work, or which have been consulted in its preparation and revision. The fact, that within a few years, three editions of the work have been called for, speaks in the best manner possible for its practical character. That which its name imports it to be, viz.: a Practical Treatise ont he Diseases of Children, it truly is. To those who do not possess a copy of it, we can cordially recommend it to their careful consideration. We feel assured from actual experience that no physician's library can be complete without a copy of this work.

ART. XIV. *A Treatise on Diseases of the Bones.* By EDWARD STANLEY, F. R. S., President of the Royal College of Surgeons of England, and Surgeon to St. Bartholomew's Hospital, Philadelphia. Lea & Blanchard, 1849, 8vo., pp. 286.

THIS volume, we are informed by its author, is the result of materials and observations, collected and continued with some diligence through many years, and in a large field of experience. "The size of the volume bears no proportion to the number of facts out of which it is constructed. For in this, as in other scientific investigations, the first object has been to obtain the facts, and the second to interpret them rightly for the conclusions they warrant. This I have endeavored to do, but with the result, I am aware of leaving some of the morbid phenomena of bone uninterpreted, even unnoticed, for the reason that they were to me unintelligible; and I am induced to submit the book in its incomplete state, rather than detail in it characters of diseases from which, in consequence of not understanding them, I should not be able to deduce either pathological conclusions or indications of treatment." Thus our readers will perceive for themselves that the work only claims to be a treatise on some of the diseases of bone. The arrangement of subjects is in four parts. Part first contains seven chapters, and embraces the following diseases, viz.:—Hypertrophy of bone, Atrophy of bone, Neuralgia of bone, Inflammation of bone, Enlargement of bone—by expansion of its tissue—with induration of its tissue—by osseous deposits on its surface, Suppuration in bone, Caries, Ulceration of bone, Death of bone, Necrosis. Part Second: Tumors of bone, Tumors of bone that pulsate, Osseous growths, arising in considerable numbers from the skeleton and in the soft tissue. Part Third —four chapters, viz.: Rickets, Condition of bone designated, Mollites and Fragilitias, Ossium, Scrofula in bone, Hard carcinoma, Melanosis in bone; and Part Fourth: three chapters, viz.: Morbid growths from the jaws, Diseases of the bones of the spine, Diseases of Periosteum. As before stated, this volume is made up principally of facts gathered from the records, cases and specimens in St. Bartholomew's Hospital, and private museums, together with a careful digest of English periodical literature. It is a good contribution to the literature of the subject; but we fear, from the perusal which we have been able to give it, that it will be found somewhat wanting in the development of general principles to guide the younger practitioner in surgery to successful and satisfactory results.

ART. XV.—*Physician and Patient; or a Practical View of the Mutual Duties, Relations and Interests of the Medical Profession and the Community.* By WORTHINGTON HOOKER, M. D. New-York: Baker & Scribner, 1849, 12mo. pp. 453.

A Philosophical Essay on Credulity and Superstition, and also on Animal Fascination, or Charming. By RUFUS BLAKEMAN, M. D., New-York: D. Appleton & Co., 1849. 12mo. pp. 206.

THE two works, whose titles are given above, possess many points of interest in common. They are designed, in part, to correct many, and some of them, long-standing errors in the professional as well as the public mind. Chapters first, fourth, fifth, sixth, eleventh, etc. of the first, and Sections sixth, seventh, and eighth, of the last-named work, may be cited as illustrations of this remark. If we greatly mistake not, the present is a propitious time for the presentation of a calm, practical, and philosophical view and discussion of the errors which hover about and exist in our time-honored profession. In and out of the profession, there are numerous errors which constantly interfere with the usefulness of the physician, among the educated and uneducated, the rich and the poor. The proper discussion of the origin, progress, influence, results, and remedies of these, are matters alike of vast practical importance to the physician as well as the people—but to the people more especially, "for they are the sufferers from the multiform and often fatal injuries, which their errors engender."

The work of Dr. Hooker is divided into nineteen chapters—the heads of which we have room only to give, viz.: Uncertainty of Medicine, Skill in Medicine, Popular Errors, Quackery, Thompsonism, Homœopathy, Natural Bone-Setters, Good and Bad Practice, Theory and Observation, Popular Estimates of Physicians, Means of Removing Quackery, Intercourse of Physicians, Interference of Physicians, Mutual Influence of Mind and Body in Disease, Insanity, Influence of Hope in the Treatment of Disease, Truth in our Intercourse with the Sick, Moral Influence of Physicians, Trials and Pleasures of a Medical Life, and an Appendix containing "Letters from a Senior to a Junior Physician," and the "Code of Ethics adopted by the National Medical Convention, in Philadelphia, June, 1847."

The object of this work would appear to be to expose to the public the fallacy of those sources of evidence upon which they rely in estimating the comparative merits of physicians, and to point out those

tests that are best adapted to obtain the information most desired—to present the claims of the profession to the respect and confidence of the community—to exhibit in a proper light, the abuses which exist in the profession, and which so frequently mislead the public into error; and to point out those means which are best adapted to perpetuate to all time that confidence and respect for legitimate medicine which the people have ever entertained for it. In the proper execution of this task, we are confident Dr. H. has succeeded in a good degree, and we desire for this volume the attention of the profession, as well as the community at large, feeling assured that it will present their "*mutual duties, relations and interests* in a clear and forcible light.

The work of Dr. Blakeman is divided into eight sections, viz.:—Mental Origin of Credulity and Superstition and its Influence on Society, Witchcraft, Dreams, Ghosts, Ecstasy, Trance, etc., Empiricism, and Quackery, Credulity in Medicine, Homœopathy, Mesmerism, and an Essay on Animal Fascination or Charming.

It was not undertaken by the author for the public originally, but to note his own opinions, and such facts derived from reading and reflection, as were deemed demonstrative of a general tendency to a more ready belief in the incomprehensible and the marvellous, rather than in phenomena susceptible of explanation by reason, aided by a disciplined exercise of the subordinate senses; subsequently it appears to have very properly occurred to him, "that their dissemination might possibly have some influence in leading to an analytical examination of various popular errors emanating from this source, which have proved most detrimental to human progress, and have essentially retarded mankind in their efforts to acquire the greatest happiness of which their natures are susceptible." In this volume he treats of the "mental origin of the various popular superstitions which have extensively prevailed among mankind at different periods, and briefly illustrates the physical, the physiological, and mental influences by which they have been fostered and strengthened." It is more particularly intended for the non-professional reader, but we see in it much that will instruct, interest and amuse the physician also.

PART THIRD.

FOREIGN MEDICAL RETROSPECT.

Report on the Nature and Import of certain Microscopic Bodies found in the Intestinal Discharges of Cholera.—[It is with much pleasure that we present the readers of our Journal with the following interesting report, presented to the Cholera Committee of the Royal College of Physicians of London, by their Sub-Committee, Oct. 17th, 1849.—Ed. *N. Y. Jour. Med.*]

We propose, in this Report, to lay before the Committee the results of some experimental inquiries, on a subject which, within the last few weeks, has engaged much of the attention of the profession. We allude to the discovery, by Mr. Brittan and Mr. Swayne, of Bristol, of peculiar bodies in the "rice-water" dejections of cholera patients; and to the statement that similar bodies have been found by Mr. Brittan in the atmosphere, and subsequently, by Dr. W. Budd, in the drinking-water of infected localities.

These observations, on account of their important bearing, if true, on the pathology of cholera, seemed to us to demand a searching examination. We have, accordingly, given much time and attention to the subject. Having, in the first place, satisfied ourselves of the distinctive characters of the bodies found in the rice-water dejections, we next sought to verify the observations of Mr. Brittan and Dr. Budd with reference to their presence in the air and drinking-water of places infected with cholera. It was necessary that this part of the inquiry should not be delayed, for the epidemic had already reached its turning point, and it would, before long, have been difficult to obtain favorable opportunities for experiments of a satisfactory character.

Our inquiries were afterwards directed to the nature and properties of the newly discovered corpuscles, and to the question of their occurrence in other diseases. In this investigation, we soon perceived that objects totally different had been regarded as identical; but we had arrived at no positive conclusion respecting those which seemed most characteristic of the cholera evacuations, when we received two important communications on the subject from Mr. Marshall and Dr. Jenner. The letters of these gentlemen are appended to this report; but the results obtained by them are embodied in it.

Our observations on the air and drinking-water of infected localities, twenty-four in number, gave uniformly negative results. With regard to the value of our experiments, taken separately, it will, we think, appear that many are liable to no objection. Some of those which relate to the drinking-water of infected places are certainly wanting in the conditions which would make them convincing. But when it is considered that Dr. Budd believes that he has detected the objects sought for "in great numbers," in such large bodies of water as the Float, at Bristol, and the Surrey Canal, and that he represents them as being deposited in the sediment of the water, we shall not be thought unreasonable in having expected that they might be discovered in the cisterns of houses and public institutions in which cholera had prevailed severely, although it had ceased there for some days or weeks.

Nevertheless, a much larger amount of evidence would have been required to disprove the statements to which our observations refer, had those statements been unassailable from other points. But the facts to be detailed in the subsequent part of this report, will show that the bodies found in the rice-water dejections have no peculiar relation to cholera; and, that if they should occasionally be present in the atmosphere, or impure water, this will not happen exclusively, or even especially, in districts infected with the epidemic.

We shall now submit the particulars of all the observations to the Committee, describing first, those on the air.

Microscopic Observations on water condensed from the atmosphere of infected localities.

Two methods were employed for condensing the aqueous vapor. One was, to suspend in the air to be examined, a glass funnel, nearly filled with a freezing mixture, its lower opening having previously been closed by a cork and covered with sealing wax. The moisture condensed on the outside of the funnel, trickled into a small phial placed beneath. The second method was, to force air slowly, by means of bellows, through a bent glass tube, immersed in ice and salt; when the moisture was deposited on the interior of the tube, and collected in a bulb at its lower part. In either way, from half a drachm to a drachm of water was readily obtained.

Obs. 1.—In Millbank Prison, from the 6th June to the 16th September, there occurred eighty-four cases of cholera. The last patient began to suffer from diarrhœa on the 16th September, and died on the 25th. On the 19th, when he lay in a state of collapse, about a drachm of water was condensed from the air of a lobby which separated his small apartment from a water closet, in which his evacuations were emptied. The water thus obtained was submitted to microscopic examination the same evening.

Obs. 2 *and* 3.—On the same day, (the 19th September,) we accompanied Mr. Bayfield, one of the surgeons of the Union of St. Olave's, Southwark, to two localities in his district, in which cholera had been most prevalent, namely, English Ground, Bull Court, Tooley-street,

and Gimber's Rents, Snow's Fields. In a ground-floor room of a house in the former court, a woman and child had died of cholera within a few days; and the husband, at the time of our visit, was in bed, ill with the disease. Nearly a drachm of water was obtained from the noisome atmosphere of this room.

In Gimber's Rents, the drainage and the ventilation was as bad as possible. In several places, we saw the openings of drains covered with matting, to prevent the escape of effluvia. We collected about a drachm of water from a house where a woman lay ill of cholera; her husband having only recently died of the epidemic. The water procured in these two experiments, was examined the same evening, and the examination of it repeated on several subsequent days.

From Gimber's Rents we brought away a piece of bread, which had been long in the house and which had not been cut in a week; a piece of butter, the surface of which was covered with dust; and a jug, which we found filled with drinking water. The examination of this water will be referred to in our second series of experiments. On the bread and the butter, no bodies like those observed in the rice-water evacuations could be found.

Obs. 4 *and* 5.—On the 22d September, water was condensed from the atmosphere in two houses, situated in St. Erman's Hill, near the Broadway, Westminster. Mr. Painter, surgeon of St. Margaret's Parish, to whom we had explained our object, conducted us to this locality, as, at that time, the chief focus of the disease. In one house—No. 21—a child lay dead, having been attacked with cholera the preceding evening. Two other cases had recently occurrred in the same house. At No. 12, a child was ill of cholera; and a second had been removed, in the morning of the same day, to the Cholera Hospital, where it died. Mr. Brittan and Mr. Newport took part in the microscopic examination of the water condensed from the air in these houses, about an hour after it was collected; but like ourselves, were unable to discover any "annular bodies." On the following day, the same water, as well as that procured in the second and third observations, was again examined by Mr. Brittan, and with the same result.

Obs. 6.—On the 6th October, cholera appeared amongst the patients in the insane ward of the Birmingham workhouse; many were attacked. On the 9th October, at our request, Dr. Fletcher, of Birmingham, kindly obtained for us some water condensed from the atmosphere of this ward, and likewise from that of one above it, when diarrhœa was prevalent. These specimens of water reached us, and were examined by us on the 11th October.

Obs. 7.—From the beginning of the month of October, cases of cholera had been numerous and fatal in the workhouse of the Walsall Union; partly imported, but partly occurring in inmates of the workhouse. When the epidemic was at its height, we obtained, through the kindness of Dr. F. Burton, of Walsall, about a drachm of water from the air of the room in which the greater number of the cases occurred. This specimen of water was condensed from the air on the 7th, and was examined by us on the 8th October.

The water condensed from the air in the several localities, and under

the circumstances we have described, was, in each case, examined by us more than once. But the search for "annular" bodies, such as those found in the cholera dejections, failed, as we have already intimated. Neither cells, nor rings, nor anything bearing any resemblance to them could, in most cases, be discovered. We saw merely portions of gelatiniform matter containing bright points—sometimes finely granular, brownish masses, perhaps derived from smoke—and occasionally colorless, transparent particles, of a crystalline appearance, which may have been portions of siliceous dust. After the water had been kept some time, chains of delicate oval vesicles, like those of the torula of yest, but much smaller, appeared in it. These were absent at first, and could not be mistaken for the cholera discs. Equally unlike those discs were the three or four separate oval cells, which, in two instances, were seen in the water when first examined. They had a clear, single outline, and were not flattened.

Microscopic Observations on the Drinking-Water of Infected Places.

Obs. 8.—On the 26th September, Dr. Snow kindly furnished us with a specimen of water from Albion terrace, Wandsworth, a locality in which cholera had been very fatal between the 28th July and the 13th August. This water, which was very foul, had been taken from a tank at Albion terrace on the 16th or 17th of August, but, as it had been kept so long before it was submitted to microscopic examination, it may be objected that, had "cholera fungi" originally been present, they might have become decomposed or otherwise destroyed.

Obs. 9.—A second specimen of water, sent to us at the same time by Dr. Snow, was obtained from a house in Gresse-street, Rathbone-place, in which five persons had recently died of cholera. The last case of the disease here, occurred two days before the water was obtained from the cistern, and twenty-four days before it was examined by us with the microscope.

Obs. 10.—From the 31st August to the 7th September, four fatal cases of cholera occurred amongst the female prisoners in two wards of the Millbank Prison. The part of the building where these wards were situated was forthwith vacated. On the 19th September, a portion of water with sediment was taken from the cistern which supplied those wards, the contents of this cistern having remained undisturbed since the removal of the prisoners to another part of the building. At the same time, specimens of water were taken from the cistern of the female infirmary, where two fatal cases of cholera had occurred simultaneously with those above referred to, and also from the tank which supplies the whole prison.—These three specimens of water were submitted to the microscope the next day.

Obs. 11.—The drinking-water taken on the 19th September from the house in Gimber's Rents, Borough, (see *Obs.* 3,) deposited a sediment, which was carefully examined. The description of the locality has been already given.

Obs. 12.—On the 27th September we visited Crosby-court, Ber-

mondsey, an open space containing seven houses. Four cases of cholera (two fatal), had recently occurred in one of these houses, the others having escaped. The house in which cholera had been fatal was closed. But we found that the water used by the inhabitants of the court came from two pumps; one supplied from the Thames water, the other raising well-water, which was hard and ferruginous. On a strict inquiry, it appeared that the Thames water was used for drinking in every house except the one in which cholera had appeared; in that house, only the well-water was used. We brought away water from both pumps, and examined the deposits, which were abundant, on the following day.

Obs. 13.—We next went to Jacob's Island, Bermondsey, a most crowded and wretched part of the district, in which cholera had been very severe. It is a portion of low ground bordering the river, and surrounded by a shallow tidal ditch, which receives the contents of the privies on either bank. The water for drinking and other purposes, is taken for the most part from this ditch. We procured some water from the ditch itself, and also from two pumps supplied from it, situated in Gutteridge's court, where deaths had occurred.

Obs. 14.—On the same day we also went to Hanover-street, Rotherhithe, a low and crowded cul de-sac. A woman lay dead of cholera in one of the houses; and other deaths had occurred. The water used, of which we procured a specimen, was derived from the Thames, through a pump which became dry at every ebb. Behind the houses on the east side, was an open ditch, receiving the refuse from them and conveying it into the Thames, at a point close to the opening of the pipe which supplied the pump in the street.

Obs. 15.—In a house in Swan-lane, Rotherhithe, close to the Millpond, a man lay dead of cholera. The disease had been fatal in two adjacent houses. The woman, whose husband had just died, told us that she and most of the inhabitants took their water for drinking from the Millpond, which is a tidal ditch, serving as a sewer to the houses on its banks. We filled a bottle with water from this source.

Obs. 16.—Dr. Burton, of Walsall, forwarded to us, on the 7th October, three specimens of water from the workhouse, cholera prevailing at the time amongst the inmates. (See *Obs.* 7.) The first was from an open cistern fed by land drains, the second from a moat, the third from cisterns in the workhouse. The last water, which is that chiefly drunk by the paupers in the workhouse, is derived from the moat, but is filtered through charcoal and gravel. The deposits of all were carefully and repeatedly examined.

Obs. 17.—To Dr. Fletcher, of Birmingham, we are indebted for five specimens of the water which supplies the workhouse, forwarded to us at the time cholera prevailed in the insane ward of the establishment. (See *Obs.* 6.) The specimens included: 1. Clear water from the reservoir which is supplied from the river. 2. Sediment from the reservoir. 3. Clear water from the cistern of the workhouse. 4. Sediment from the bottom of the cistern. 5. Sediment from the side of the cistern. These specimens were examined on the 11th inst., and the examination of them has been most carefully repeated.

Obs. 18, 19, 20, 21, and 22, were all made on water obtained for us by Mr. Hunt, one of the assistant surgeons at the Westminster Cholera Hospital, from several parts of the district called Palmer's Village, which we have ourselves inspected. The names of the places are Goodman's Green, where the water used for all purposes is contained in a filthy open trough; Perrin's place; a house (No. 3) in Perrin's-court, in which five cases of cholera (two fatal) had occurred; a house (No. 2) in Providence-row, where also there had been five cases (three fatal); and the Dispensary, Palmer's Village, at which two surgeons successively had been attacked with cholera, one fatally. Cholera had prevailed in all these localities, but not within a fortnight of the time when the water was taken for examination.

Obs. 23.—In a small house (No. 9) in Dorset-place, Vauxhall-road, three cases of cholera had occurred in succession; the first on the 5th instant, the second (fatal) on the 8th, and the third (also fatal) on the 12th. These cases were attended by Mr. Clark, of St. James's-terrace. On the 8th instant, just after the second case occurred, two specimens of water were, at our request, taken from the butt supplying the house —one from the surface of the water, the other from the tap after the sediment had been stirred up; and both have been several times examined with the aid of the microscope.

Obs. 24.—On the 5th of October, a man laboring under cholera was admitted into University College Hospital. He had resided for some months at No. 4 Howland-street. A week previous to his attack, he had changed his room to another in the same house, where a woman had died of cholera seven weeks before. Water was taken from the kettle, and from a stone water-jug in his room, as well as from a cistern which supplied the house. As he had dined in another house on the day previous to his attack, water was procured thence also. The deposits of these several specimens were likewise submitted to careful microscopic examination.

The uniform result of these experiments, as of the former series, was negative. No bodies were found which could be regarded as identical with the more characteristic of those discovered by Messrs. Brittain and Swayne, in the rice-water dejections of cholera. The objects met with were far more numerous than those seen in the moisture condensed from atmosphere. The sediment, when viewed with the one-eighth-inch object-glass of Ross, or one-sixteenth-inch object-glass of Powell and Lealand, presented, besides amphorous matter, an almost endless variety of organic forms, both animal and vegetable. Amongst these were many round and oval cells, of various dimensions, and some separate rings of minute size, colorless, and pellucid. The cells had generally very delicate walls and a clear cavity, were never flattened, and often contained a multitude of distinct granules, which, in some instances, presented the molecular motion. Like the rings, these cells were obviously different in their nature from the thick-edged discs, which the descriptions and drawings of Messrs. Brittan and Swayne and Dr. Budd had led us to regard as the characteristic corpuscles of the cholera evacuations.

The negative results of our search in the atmosphere of infected

places, for objects identical with those just referred to, are confirmed by some observations communicated to us by Mr. Marshall. While cholera was prevalent in St. Giles's, he examined the dirt washed from the broken glass of windows, and from cobwebs taken from houses in that district, in which deaths had occurred from four to ten days previously. With one-twelfth-inch or one-eighth-inch object-glass, he found a vast number of objects, such as particles of silex and soot, hairs, wings, and legs of insects, round and oblong cells of a brownish color, very dark spherical granular masses, probably of a confervoid nature, and fragments of vegetable tissue, amongst which were pieces of spiral tubes, and entire rings, apparently of woody tissue, of an oval, polygonial, or circular form. But he detected no discs with double outline. A microscopic examination of the objects collected on a moist surface from the atmosphere of sewers, gave Mr. Marshall a similar negative result with regard to those discord bodies; although he found, (besides fine particles of silex and other dust) brown, oval, and round cells, single and in couplets, minute colorless vesicles, either single, double, or in triplets, a single large oval cell, and numerous opaque, granular, confervoid bodies, of a brownish or blackish green color.

Microscopic Observations on the Bodies found in the Cholera Dejections.

We next proceed to show how various are the bodies which have been confounded together under the terms annular bodies (Mr. Brittan), cholera cells (Mr. Swayne), and cholera fungi (Dr. Budd).

On examining the drawings given by the three gentlemen who have called attention to the subject, four principal forms, which can hardly belong to the same objects, may readily be distinguished.

1. *Rings*, which enclose a free area, and which often are broken.. These are usually of minute size, according to Mr. Brittan and Mr Swayne, but occasionally large, according to Dr. Budd.

2. *Globular, or oval cells*, chiefly of the middle size, which have a thick wall, with numerous small eminences on its surface, and contain a granular mass, in some instances, separated by a clear space from the wall of the cells. These are distinctly figured only by Mr. Swayne, but are regarded by him as perfectly developed cholera cells.

3. Bodies having apparently the form of *discs, with thick rounded edges*, and centres of indistinct structure. These vary extremely in size, including some of nearly the smallest, as well as many of the largest, of the objects represented by the three observers. They predominate in all the representations given of the corpuscles of the rice-water dejections, and must be taken as the type of the bodies discovered by Messrs. Brittan and Swayne.

4. Large *broken cells*, having apparently homogeneous membranous walls, and containing small, well-defined, oval bodies; figured by Dr. Budd as cholera fungi undergoing decay, but differing in character from all the other objects represented.

A mere inspection of these different figures would suggest strong doubts as to their representing different appearances of really identical bodies in different states or stages of development or decay. The more particular description we have now to give of each kind of body, will demonstrate that they are of various and distinct nature.

1. The rings, when closely examined, are seen to be of different kinds; some perfectly continuous in their entire circle; others formed by a curled fibre; some round, some oval, others lozenge-shaped.

Some of these have been traced to their source by Mr. Marshall, who has found that exactly similar objects may be prepared by the artificial digestion of the vegetables used as food—such as cabbages, potatoes, and onions, the withered style of wheat grain, and portions of cane in sugar; the spiral and annular tissues of which break down into rings of different sizes, or coils resembling rings.

Intermediate between these and the third class of bodies are minute, oval or round, colorless corpuscles, which have an annular appearance; but, on close inspection, are seen to have their area filled up with a transparent substance, presenting sometimes perforations. In some specimens of the rice-water fluid, oval bodies, in part having their middle filled up as here described, and, in part, mere rings, exist in extraordinary abundance. The rings of these bodies have been observed, by Mr. Busk and Dr. Griffith, to be divided, by cross lines, into segments, which Mr. Busk thinks are bead-shaped—an appearance which had occasionally been noticed by ourselves as well as by Mr. Marshall. They are calcareous structures, originally derived from chalk, in which they abound; and they have been introduced into the contents of the intestines with the medicines (chalk-mixture, aromatic confection, &c.) which the patients have taken.* These minute bodies from the chalk, are, of course, not found in all cases: and we think it not unlikely that, in their absence, the separated nuclei of animal and vegetable structures, as well as the vegetable rings above described, may sometimes have been mistaken for fungi.

2. The globular bodies have been clearly identified by Mr. Marshall with the spores of the different kinds of uredo, the rust, smut, and bunt of grain; some species of which may be found, not only about the withered style on grains of wheat, but also in almost every specimen of corn and bread.

Mr. Busk has made the same observation, and identifies them with the uredo segetum or bunt.

3. Discs, with thick, elevated, and somewhat irregularly curved margins; the central area flattened, and obscurely granular. They have generally a yellowish, or pale brown tint, which varies in depth

* It is right to state how we arrived at the knowledge of these facts. Dr. Griffith had pointed out to us that the bodies in question are heavy, polarize light, and are soluble in dilute nitric acid. He suspected that they were oxalate or phosphate of lime. Mr. Marshall subsequently showed us that acetic acid also dissolves them readily, and that sulphuric acid acts on them, producing needles of sulphate of lime. Having ourselves found the same bodies in the evacuations of two patients suffering from typhoid fever, we were examining them in company with Dr. Griffith and Mr. Marshall, when the demonstration of their calcareous nature reminded us of the fact, that these patients had been taking medicine containing chalk, and, at the same time, brought to our recollection the remark made to one of us by Mr. Topping, that Mr. Brittan's "annular bodies" were to be found in chalk-mixture. Accordingly, we examined a portion of medicine containing aromatic confection, and, afterwards, a piece of common chalk, and, in both, found the bodies described above, though not the larger discs which are also found in the rice-water fluid. Ehrenberg figures these calcareous bodies, and describes them as being "crystalloids." Abh. d. Akad. d. Wiss. z. Berl. 1838, p. 68.

with the color of the fluid containing them. These are the most peculiar of the bodies found in cholera, and differ from the rest in being more or less soluble in ether. Mr. Marshall, who first informed us of this fact, found that the smaller discs undergo nearly complete solution, leaving a cavity in the dried mucus, whilst the larger ones leave a fine granular film. They are apt to break across, and the thick margin to curl inwards. They are evidently not cells, nor have they any organized structure which could give them any claim to be regarded as living organisms. On the other hand, their solubility in ether shows that they consist, in great part, of some substance of the class to which the fats, resins, and saponaceous matters belong. This observation led Mr. Marshall to examine different fatty substances, and at length to find that curled concretions, not unlike the discs found in cholera, could be obtained by compressing a piece of rich cheese (with or without the addition of ether) between two plates of glass. We are not yet able to account for the origin of these peculiar discs. Mr. Busk regards the smaller ones as altered starch grains. It is, at all events, certain that they are not fungi; and, as we shall afterwards see, that they are not peculiar to cholera.

Mr. Busk thinks that the larger discs are the altered contents of the bran-cells. Mr. Marshall, too, has, independently, made the observation, that certain yellowish bodies, sometimes seen, which have a thinner and narrower border than the fatty discs, and are merely rendered pellucid by ether, may, perhaps, be derived from bran. The granular masses contained in bran-cells have, however, when undigested, no distinct border.

4. Under the fourth class of bodies, we refer to those represented by Dr. Budd as the cholera fungi, undergoing decay and disintegration. They are evidently of a different nature from those figured by him as characteristic of the fresh cholera dejections. The mode of disintegration of the two classes of bodies is quite distinct: the so-called cholera bodies, after resisting the action of water for some time, break up into irregular granular masses; whilst the decomposing bodies depicted by Dr. Budd, seem to be, in part, homogeneous membranous cells dehiscing; and are, perhaps, starch cells. The rings are, most probably, parts of disintegrated vegetable tissue.

It is shown by Mr. Marshall, and had before been noticed by Boehm, and others, that cells like fungi, or their spores, are occasionally found in the excretions in cholera. These, however, have a more delicate structure than any of the bodies described as characteristic of cholera, and are totally different from them. It is well known that various vegetable forms are apt to become developed in organic fluids generally.

From a review of the foregoing facts, it is obvious that various bodies found in cholera dejections have been confounded, and described as identical. It is also shown, that many are traceable to an extraneous source, and that even the discs placed in our third division, are not fungi. The statement, that the bodies found in the cholera dejections present an endogenous multiplication, has, in all probability, arisen from confounding them with the uredo, or from mistaking the appearances produced by the small bodies seen through, or upon the larger ones, or entangled in their substance.

We are unable to identify the rings obtained from the air, and figured by Mr. Brittan, with any of the bodies included by him under the term "annular bodies." Our own experiments have satisfied us that these bodies do not commonly exist in the atmosphere of infected places, but the observations of Mr. Marshall, on the dirt collected from windows and cobwebs, show the great variety of matters which must be wafted about in the air, in the form of dust, and which might, in different instances, be caught with the condensed moisture.

The bodies represented by Dr. Budd, as being found in impure drinking water, have the form of discs with thick edges. We have ourselves never seen such bodies in water. But, if it should be established that the contents of bran-cells sometimes assume that form, the occasional presence, in water, of bodies capable of being confounded with the discs derived from the discharges of cholera, will not appear remarkable.

Had the bodies described by Messrs. Brittan and Swayne been proved by the foregoing investigations to be of fungoid nature, yet the facts we have now to add would have shown that they have no necessary connection with cholera. In the first place, they seem not to be constantly present in the discharges. It is, indeed, remarkable that, in those dejections which, from the absence of color, have usually been regarded as the most characteristic of the disease, they are frequently absent. We have failed to find them in several instances. In one, a portion of every evacuation was set apart, and examined several times by each of us, and yet in no portion would we detect them.

A still more important fact, which, from the explanations already given, might be anticipated, is, that all the more remarkable of the bodies which have been thought peculiar to cholera, exist in the intestinal evacuations of persons affected with other diseases. Dr. Jenner first demonstrated to us their presence, in great abundance, in the dejections of a patient affected with typhoid fever. We have since verified his observation in five other cases of this disease. We have also satisfied ourselves of the existence of some of the forms in dejections apparently healthy, from two patients in Guy's Hospital, one suffering from bronchitis, the other from early cirrhosis of the liver; and Mr. Marshall has detected small annular bodies "in the mucus covering the healthy excrement" of several herbiferous animals. It is obvious that bodies derived from such various sources will not commonly be found all present together. This, indeed, is not the case in cholera. The minute bodies, especially, which belong to chalk, will, of course, very rarely be met with, except that substance has been taken as medicine.

We shall now briefly re-state the principal results we have arrived at, and submit the conclusion which seems to us justified by them.

1. Bodies presenting the characteristic forms of the so-called cholera fungi are not to be detected in the air, and, as far as our experiments have gone, not in the drinking water of infected places.

2. It is established that, under the terms "annular bodies," "cholera cells," or "cholera fungi," there have been confounded many objects of various and totally distinct natures.

3. A large number of these have been traced to substances taken as food or medicine.

4. The origin of others is still doubtful, but these are clearly not fungi.

5. All the more remarkable forms are to be detected in the intestinal evacuations of persons laboring under diseases totally different in their nature from cholera.

Lastly, we draw from these premises the general conclusion, that the bodies found and described by Messrs. Brittan and Swayne are not the cause of cholera, and have no exclusive connection with that disease—in other words, that the whole theory of the disease which has recently been propounded, is erroneous, as far as it is based on the existence of the bodies in question. (Signed)

WILLIAM BALY, M. D.,
WILLIAM W. GULL, M. D., } *Cholera Sub-Committee.*

Treatment of Remittent Fever in Children. By F. CHURCHILL, M. D.

I generally give some form of stimulant during the second and third weeks of the affection. The prescription which I usually follow is one much praised under such circumstances by Dr. Steiglitz, of St. Petersburgh. For a child of five years old, it consists of four minims of dilute hydrochloric acid, eight of the compound spirit of sulphuric ether, and three drachms of camphor mixture, every six hours. It seldom disorders the bowels, if they be not much disturbed at the time of commencing its administration; while, if this be the case, a small dose of Dover's powder, as a grain or a grain and a half at bed-time, will be doubly useful, both in checking the tendency to diarrhœa, and in procuring sleep for the child, who, without it, would probably be watchful and delirious all night long. Whilst any severe abdominal symptoms are present, I abstain from the use of the acid mixture, but give the mercury with chalk, and Dover's powder, every four or six hours, to which I occasionally add an opiate enema at bed-time; and support the strength by food and wine as may be necessary.

On Eclampsia Nutans, or "Salaam" Convulsions of Infancy. By WM. NEWNHAM, Esq.—The disease which the author describes in the following pages is but little known, few, if any, cases being recorded besides the four which are appended to this essay. It appears to be one of fearful importance also, two of the four cases having ended in idiocy. The pathognomic symptom is "a peculiar bowing forward of the head," which is repeated with greater or less rapidity, sometimes as many as a hundred times. Our space will not allow of the detail of all the cases brought forward by the author; but the characteristics of the affection are sufficiently seen in the following:—

A child, æt. 16 months, was observed on January 1st, 1839, to have a peculiar heavy look about the eyes, which was supposed to depend on the stomach, and was treated by alteratives. The peculiar nodding of the head occurred thrice on this day; but rapidly increased in number and severity. The forcible bowing of the body on one occasion took place as many as one hundred and forty times in the minute, and

were apparently accompanied by considerable suffering. They were followed by exhaustion and disposition to sleep.

About the middle of March the right arm and leg were observed to lose power, and ultimately became paralytic. By the middle of April she had ceased to be able to crawl, and her countenance indicated cerebral distress. This increased till the end of May, at which time she often awoke with violent screaming and spasm of the whole body, the head being first thrown back, and then bowed violently to the feet, which were also drawn upwards. The child then fell into uneasy slumbers. There was much sluggishness of the bowels. On the 27th of May she fell into a comatose sleep, which lasted some hours. This was repeated on the 29th. From this date improvement commenced, and the attacks were suspended till the 21st of June. After this there were slight bowings, and on the 9th July they increased in severity for three weeks, when they ceased. During this whole time she made no intellectual progress, and when three years old was as backward as a child of two. At a more advanced age the same was observed. She appeared a retiring girl, of a capacity below her age. The treatment was at first tonic. Zinc was given, under the impression the disease was allied to chorea. Subsequently the bichloride of mercury was given in 1-16 grain doses, and aperients. Latterly the mercury was omitted, and at the time of her ultimate improvement, no medicine was given to which it could be attributed.

In his commentary on the above and three other cases, Mr. Newnham remarks that the disease appears to be spinal in its origin, though cerebral symptoms are superadded subsequently. The effect on the mind is marked and invariable, though not to the same extent in all cases. Of the four cases recorded one only recovered, and that not perfectly. In addition to the induction of mental imbecility, paralysis has been a consequence, either in the form of paraplegia or hemiplegia. It is to be remarked, that in each case the severe attacks of "bowing" have been preceded by sleep, and the severity seemed in proportion to the depth and duration of the sleep.

The author notices an evident alliance of this disease with epilepsy; tetanoid symptoms also occur during its progress. Speaking of the causes, he looks upon irritation of the pneumogastric nerve as a possible, but not the essential cause. In the same category of unproven causes he would place irritation of the spinal nerves by the presence of worms. The essential nature of the disease is considered by Mr. Newnham to be inflammatory action of a low or strumous character, commencing in the membranes of the medulla oblongata, and extending to the membranes covering the base of the brain. This inflammation he conceives to be followed by exudations of lymph and serum, the pressure of which produces paralysis. The nutrition of the brain is also interrupted.

The author's views of the treatment are based on this view of the pathology of the disease. He would avoid depletion, subduing high action, if necessary, by antimony. He would then give alterative doses of hydr. c. creta, and the iodide of potass with excess of potass or sarsaparilla; if the child were anæmic, he would add some form of iron. He approves of some form of counter-irritation, and prefers the seton.

Among auxiliary measures he refers to lancing the gums, the avoidance of all mental excitement, the warm bath, keeping the head free from covering, causing the child to sleep on a hard pillow, and taking care that the child be not rocked to sleep previously to being placed in bed. The diet should be light and digestible, but at the same time nutritious. The meals neither too close together, nor too far apart. Acidity of the stomach is to be avoided. Air and exercise are also mentioned as important adjuvants.—*British Record of Obstetric Medicine.*

On the Nutritive Properties of Fish Oil. By Robert Druitt, F. R. C. S.—Of the virtues of cod liver oil there can be now no question;—and it seems capable of doing two things. In the first place it fattens and adds to the bulk of the body; and, in the second place, it gives nutrition a better turn, as it were; it makes the fluids and solids healthier as well as bulkier, and enable them to throw off a variety of cachectic derangements. These useful qualities have been partially accounted for on the supposition that they are due to a minute quantity of some biliary principal contained in the oil. This supposition seemed to me extremely improbable, especially on considering the numerous adulterations to which the oil was liable; and accordingly I determined on making a few experiments on the subject, the results of which I beg to forward to you.

For this purpose I applied to my oilman for some specimens of the purest and sweetest lamp oil, and procured several varieties of whale and seal oil, decidedly fishy and rank in flavor, but not rancid or oxydized or putrescent. In fact, the flavor of the oil commonly called "southern oil," the produce of the black whale, which I chiefly employed, is not disagreeable to any one who is free from fancies on the subject; and if mixed with three or four parts of almond oil, is not a whit more offensive to the taste than the common *oleum jecoris asselli.*

Case I. and II.—Two brothers, S., aged 3 and 5, flabby, pasty children, each suffering from pustular eruption on the head and face. A wound made on the head of one of them a week since had degenerated into a flabby sore. No deficiency of food. Both took a teaspoonful of seal oil three times a day in lemonade. Their mother reports that they were excessively fond of their medicine; they took it for a fortnight, when the skin of each was quite healthy, and complexion clear.

III.—J. W., a pale, unhealthy child, aged 2½ years, subject to pustular eruptions on the face. Cured by the same dose of southern oil, thrice daily for a week. Cured far more readily than on former occasions by calomel. Likes the oil extremely.

IV.—J. L., a miserable child; glands in neck greatly enlarged; purulent discharge from ears; abdomen swelled and hard. This child got better under the use of seal oil, but did not take it regularly enough to make the case of any value.

V.—J. E., aged 2, subject to skin disease from birth; his mother has had syphilis; his complexion peculiarly pasty and sallow. Took southern oil in the above doses for a month. Greatly improved in flesh and complexion; but at the end of the course had an attack of eczema in the arms.

VI.—W. æt. 30; subject to sciatica. Took the southern oil; is certain that it has done him much good.

VII.—J. W., æt. 36. Was largely bled for acute rheumatism a twelvemonth since. Has never recovered flesh or strength, and is racked with pains in the back and shoulders. Took cod liver oil for a month with benefit last May; left it off during the summer; became thinner and weaker. Took southern oil in the dose of two drachms thrice daily for three weeks; likes it much; feels stronger, and looks as decidedly fatter and better in condition as he did from the cod liver oil.

Mrs. P., suffered from puerperal mania whilst suckling last autumn; has continued anæmic and despondent; has taken every form of mineral and vegetable tonic with temporary benefit. Took southern oil for three weeks, is unmistakeably plumper, clearer in complexion, and in better spirits.

IX.—J. M., a sallow child, æt. 4, took the southern oil for a week, for impetiginous eruptions on the face and legs. The improvement in flesh and clearness of complexion was extraordinary, and the eruption nearly disappeared.

These few cases do not prove much: but, so far as they go, are satisfactory. No one who had seen the children above mentioned before and after their course of oil, could doubt that a most beneficial change had been wrought by something. The great delight which the little wretches took in their dose is another point worth noticing. I would therefore suggest, that it is well worth while to make a fair experiment on a large scale, to determine whether it is fish oil in general that does good, or only the oil of the cod's liver. If, as I believe, almost any kind of fish oil will answer the purpose, then many of the poor will be able to use the cheaper kinds, who could not afford the nicer but more costly cod-liver oil.—*Medical Gazette.*

On the Treatment of Strumous Corneitis, Hypopion and Syphilitic Iritis. By Mr. HANCOCK.—The author employs iodide of potassium extensively in strumous inflammation of the cornea, attended with opacity from interstitial deposit; in interstitial abscess of the cornea; in iritis, attended with effusion of matter into the anterior chamber; in rheumatic inflammation of the sclerotica and iris, assuming the chronic form; and, indeed, in all cases of deep seated inflammation of the eye, occurring in debilitated or irritable constitutions. He considers it superior to calomel, exerting its absorbent powers more quickly and with greater certainty, and without, in the majority of cases, producing the distressing ptyalism. In syphilitic iritis, he seldom found it necessary to push mercury to any great extent, and usually gave two grains of it every night at bedtime, combined with opium; and at the same time the iodide of potassium mixture twice a day; using the latter medicine in the formula recommended by Lugol.—*Lon. Jour. Med.*

On the Depurative Action of the Bile. By Dr. FAUCONNEAU-DUFRESNE.—Speaking of the function of the liver as auxiliary and vicarious to that of the lungs, the author observes:—In intra-uterine life, the

bile, in the absence of respiration, purifies the blood by the removal of carbon. The meconium of the fœtus is the carbon of the blood, extracted in a liquid form, which after birth will be eliminated in the gaseous form. If it is objected that the biliary secretion in the fœtus is not manifested until towards the fourth month, it may be answered that, until this period, the liver is of very considerable proportionate size, and that it retains, for the purpose of its augmentation, materials, which, later, will serve for the secretion of this fluid. This function of the bile is not so applicable in extra-uterine life. In the different vertebrata, the development of the liver is generally found to be inversely to that of the lungs. This remarkable antagonism exists especially in fish, which respire by the bronchiæ. In certain species of serpents the bile is very abundant, as if to compensate for their imperfect respiration.

MM. Sandras and Bouchardat (Annuaire de Thérapeut. 1845,) have established that, whatever be the nature of the aliment taken by an animal in good health, the quantity of fatty matters found in the blood is nearly the same, which gives rise to the supposition that they are eliminated as fast as they are introduced into it. According to the same authors, the fatty bodies which the liver separates from the blood have a constant point of fusion, and consist principally of cholesterine, which the blood of carnivora always contains, and of the margaric and oleic acids, united with soda. The fatty bodies of the blood are subjected to a series of successive oxidations, by which the solubility of the sodaic compound which they form, is indefinitely increased. Cholesterine may result from the alteration of the fatty bodies; for it is a neutral fat, the point of fusion of which is very high, and which, not having been burned in the blood, must necessarily become eliminated from the economy.—*Brit. & For. Med. Rev.*

Treatment of Eruptive Diseases of the Scalp. By D. Neligan.—Dr. Neligan is in the habit of employing, as local remedies in Diseases of the Scalp, the carbonates of soda and potash, either in ointments or lotions. The carbonate of potash being most irritating, he prefers it in pityriasis, herpes, and the chronic forms of eczema; but for impetigo, and the acute and recent cases of the other eruptions, he recommends the soda. In the treatment of the inflammatory division of eruptive diseases of the scalp, the alterative medicine used by Dr. Neligan is the yellow iodide of mercury, in combination with hydrargyrum c. cretâ, and aromatic power. In all cases, the patient is kept strictly on milk diet, during the whole of the treatment.—*Lon. Jour. Med.*

Fibrous Tumor, compressing the Ureters, and causing Renal Disease. By Dr. Murphy.—A woman applied to the author, having the pelvis occupied almost entirely by a firm tumor, so that the os uteri was beyond the reach of the finger, and micturition impossible, except by the aid of a catheter. After a few days he was called to her, and then passed a gum elastic catheter to its full length, but obtained no urine,

although she was suffering from symptoms of retention of urine; she rapidly sank and died. On opening the abdomen, a large tumor was found, which had displaced the intestines, and reached upwards to the umbilicus, and laterally to the iliac fossæ. The mass of the tumor lay on the left side, and had nearly incorporated the uterus, which, however, with the right ovary, was found projecting from its right margin. The bladder was contracted and empty; but the ureter, being compressed by the tumor, were enormously distended and tortuous. The kidneys were enlarged and in advanced state of Bright's disease. The tumor proved to be fibrous, engaging the whole posterior wall of the uterus, the cervix being stretched for some inches along the anterior surface, and expanded over it. The uterus had been drawn out of the pelvis by the growth of the tumor. A small portion in its centre was softer and more friable than the rest. The author drew attention to the unusual position of the tumor, occupying the pelvis so completely as to displace the uterus entirely; to the advisability, if practicable, of pushing such a tumor out of the pelvis when small.—*Lon. Jour. Med.*

SURGERY.

New Operation for Vesico-Vaginal Fistula. By M. Jobert.—M. Jobert, Surgeon to the Hospital St. Louis, has introduced an operation for this hitherto intractable accident, and which he designates "Autoplastie par glissement," and by which he has succeeded in effecting many perfect cures. The following part or stages constitute this new operative proceeding:—

1. The patient is placed on her back, the pelvis approached to the edge of the bed or table, and the thighs flexed as in the operation for lithotomy. The walls of the vagina are to be separated by means of a univalve speculum and curved levers contrived for the purpose. The cervix uteri is then to be laid hold of at the point of insertion of the vagina, by a pair of hooked forceps, furnished with a rack at their handles, and being drawn down to the vulvæ, is maintained in that position during the entire operation.

2. A semi-circular incision detaches the insertion of the vagina from the cervix uteri. The two lips of this incision instantly separate, leaving a bleeding surface about one inch in width. The vagina with a gliding movement slides spontaneously forward, whereby the lips of the vesico-vaginal fistula are approximated, and the loss of substance repaired.

3. The edges of the fistula are then to be pared with a bistoury or scissors. The *mucous membrane* only is to be removed, to the extent of about one centimetre = one-third of an inch. It is important to remove only the mucous membrane, in order that further loss of substance be not incurred; and it is equally important to secure a sufficiently extensive bleeding surface for subsequent union.

4. The cut edges are next to be brought together by interrupted

sutures, each at the distance of about one third of an inch, leaving so much of the ligatures as shall facilitate their removal at the proper time.

5. If any gaping of the edges of the fistula should remain, it is also important to remove this by superficial incisions on either side of the fistula.

6. Hemorrhage is to be restrained by a plug of tampon introduced into the vagina, and which is to be removed in a day or two, perhaps on the following day.

7. An elastic catheter is to be introduced and retained in the bladder. The patient must maintain the recumbent posture, with the legs raised on cushions, until union has taken place.—*Bulletin de Thérapeutique*, Fevrier, 1849.

Conclusions respecting Laryngotomy in Croup.—By F. Churchill, M. D.—1. That the larynx is not mechanically closed by false membrane; that in all cases, as Dr. Cheyne has remarked, there is sufficient space for the access of air; that if the larynx be closed, it must be by spasm in addition to the exudation; and that, therefore, to attempt relief by a mechanical operation would be superfluous, to say the least of it.

2. That it is extremely difficult to say that exudation has taken place, and still more to fix the limits of it, and pronounce in any case that it has not extended below the larynx; and yet upon this depends the utility of the operation; for—

3. If the false membranes have extended below our incision, the operation, being purely mechanical, can afford no relief, but may seriously add to the danger.

4. Bronchitis or pneumonia may exist at the time of the operation, or may very likely arise very soon after, and render it altogether useless.

5. The operation itself is not without danger, nor quite so easy as has been stated, especially with young infants. In addition to hemorrhage and escape of blood into the trachea, the patient may be attacked by prolonged syncope, asphyxia, or convulsions, as occurred in M. Trousseau's practice, and occasionally either of them may prove fatal.

6. That the risk of inflammation and other accidents after the operation is very considerable, and materially diminishes its value.

7. That the results of the operation hitherto, although successful to a considerable extent, are not sufficient to justify our having recourse to it under ordinary circumstances. "If," says Mr. Porter, "it were possible to place a host of those cases in which bronchotomy had not proved serviceable, in array against those wherein it had seemed to be useful, it would scarcely be necessary to advance any further argument in proof of its uncertainty."—*On Dis. of Inf. and Childhood.*

Treatment of Fissure of the Rectum. By M. Maisonneuve.—M. Maisonneuve has related several cases of fissure of the rectum, treated

with the best effect by forcible and sudden dilatation of the anal opening; his mode of proceeding is to introduce the index finger of each hand into the rectum, back to back, and then to separate them with considerable violence; as this is attended with great pain, he puts the patient under the influence of chloroform previously, and has the rectum washed out by one or two emolient clysters; on making the dilatation a little blood usually comes away, and the anus remains open for a few minutes, until the sphincter has regained its tone. M. Lepelletier has also practised this treatment very often, with an instantaneous cure in every instance.

Many objections to this proceeding will occur to every practical surgeon, and with them this consideration to boot, that Boyer's treatment by incision in simple fissure of the rectum is always successful, presents no difficulty in execution, and is attended with hardly any pain or inconvenience. The truth is, that a timorous patient who will not suffer a knife to be employed, may be cured by one or two applications of lunar caustic to the part.—*Jour. de Méd.*

Treatment of Fistula.—M. Ameuille lately mentioned, at a meeting of the Société Medico-Pratique of Paris, that he had succeeded in completely curing very refractory fistulæ of the groin and axilla, by injecting into them, for a few days, a mixture of ten parts of tincture of iodine to fifty of distilled water. The mixture should neither be decanted nor filtered, but well stirred before use. The pain resulting from the injection may be mitigated by a poultice, and the patient be allowed to rest for a while. In some cases slight compression must be used besides the injection.—*Dub. Med. Press.*

On the Treatment of Chronic Inflammation of the Bladder, by Injections of Nitrate of Silver. By R. L. Mac Donnell, M. D.—The patient being placed either in the erect position or on a sofa, a gum-elastic catheter, about the size of No. 9 or 10 (Weiss), introduced, and water at the temperature of 98° Fahr., is injected through this into the bladder, by means of a caoutchouc bag, or what I prefer, a syringe, with a "three-way valve," by which the fluid can be drawn back from the cavity if necessary. After the bladder has been completely cleansed of any fœtid urine and mucus which may be contained in it, the solution of the caustic, being heated to the same degree, is to be introduced in a similar manner, and allowed to remain there for about one minute, care being taken, by compressing the urethra, to prevent its being forcibly ejected by the violent straining that is certain to be induced. The quantity of water or solution should never exceed four ounces, for though the bladder in its healthy state is capable of containing nearly a pint and a half of urine, without being over distended, yet as the quantity it is capable of retaining in severe chronic inflammation seldom exceeds a few tablespoonfuls, the bladder accommodates itself to its diminished contents, and gradually becomes smaller, and consequently a large injection would act injuriously in two ways—by over-distending the organ, or by passing up into the ureters. In fact, we find it unnecessary to use a larger quantity of the solution than I have mentioned,

for it requires some address to introduce even that amount without resorting to force. The patient is then ordered a warm bath, and should the urine become bloody or mixed with shreddy concretions, he should use frequent fomentations and anodynes. But these symptoms seldom last for more than a few hours, and our patient should always be informed that such consequences are likely to be the immediate effects of the operation.

The strength of the injection has seldom to be increased beyond five grains to the ounce, although in one instance, that of an old gentleman, aged seventy-two, I had to increase the strength *gradually* to ten grains to the ounce before a satisfactory effect was produced. It is, however, always better to commence with a weak solution, which may be made stronger, according to the circumstances of each case, and the judgment of the practitioner. Some of my patients have hesitated about undergoing treatment by injections, in consequence of their advanced age, but though the disease is not in such cases so easily cured, as in the young subject, it is still in the great majority of instances remediable by the same means, as was proved by the great relief obtained by a patient aged *seventy-six*, who was under my care in the Montreal General Hospital, within the last month, into whose bladder I injected, on two occasions, a solution of nitrate of silver, two grains to the ounce. He left the Hospital of his own accord, May 23, quite free from his former complaint.

[The foregoing treatment is illustrated by a number of successful cases, and we have reason to believe is deserving of the particular attention of the practitioner, when called upon to treat this obstinate and distressing lesion.—Ed. *N. Y. Jour. Med.*]

MIDWIFERY.

Pathological Relations of Spasmodic Contractions of the Uterus. By W. Tyler Smith, M. D.—The following philosophic resumé we extract from Dr. Smith's late work: The resemblance between rigidity of the os uteri and the most simple form of encysted placenta—namely, sphincteric closure of the os uteri with retention of the placenta—is at once obvious. The same contracted state of the os uteri is present in inversion, after the uterus has descended through the os uteri. In the form of encysted placenta, or irregular action of the uterus, constituting hour-glass contraction, we have precisely the same condition of the middle portion of the uterus as that which obtains in the second stage of inversio uteri. In simple hour-glass contraction, the cavity of the uterus is divided into two parts by the contraction of the middle portion of the organ; but when owing to irregular action of the fundus, this part of the organ descends into the cavity of the uterus, and the hour-glass contraction then occurs, the fundus uteri is seized by the contracting ring of the uterus, borne down through the os uteri and vagina, and inversion is thus rendered complete. After the inver-

sion, the os uteri, which dilates to allow the inverted uterus to pass, becomes firmly contracted. Again: all these abnormal actions, occurring after delivery, are but modifications of excessive after-pains. In severe after-pains, it is easy to feel with the hand that the uterus becomes hard and prominent at particular points, and soft and depressed at others. From these irregular contractions, the more serious irregularities of uterine action arise. Sphincteric closure of the os uteri prematurely, is the most simple derangement; next comes the annular contraction of the upper part of the cervix, or the body of the uterus, in hour-glass contraction; and lastly, the phenomena of inversion, which is the most compound of all these disordered actions. Thus rigidity of the os uteri, encysted placenta, inversion of the uterus, hour-glass contractions, and excessive after-pains, are merely modifications of irregular uterine action, and they are all convertible one into the other.

Puerperal Convulsions; their Dependence on Toxæmia. By J. Rose Cormack.—Dr. Cormack detailed the history of three cases of puerperal convulsions which had occurred in his practice. The main object of his paper was to point out the connection between renal congestion and puerperal convulsions, which exists in a very great proportion of cases. He considered puerperal convulsions to be—though not always, yet generally—the toxicological results of non-elimination of the excretion of the blood; and that, in by far the greater number of cases, this non-elimination depends on renal congestion, caused by the pressure of the gravid uterus. Œdema and albuminuria are frequent concomitants or precursors of convulsions, as shown by Dr. Lever and by MM. Devilliers and Regnault. The gravid uterus, or any tumor pressing on the renal veins, must cause congestion of the kidneys, and consequent toxæmia; and this is the more injurious to the pregnant woman, as her blood requires an extra degree of depuration, both from excrementitious matter from the fœtus, and also from the elements of milk. Retention of these should, Dr. Cormack thought, be considered as the cause not only of convulsions, but also of various other distressing symptoms occurring during pregnancy. Uterine epilepsy probably often arises from toxæmia; and the suppression of the alochi may induce post-partum puerperal convulsions. When convulsions occur after delivery, we must suspect structural renal disease. The explanation of delivery generally arresting convulsions is not so much that uterine irritation is lessened, as that the hyperæmic state of the kidneys is relieved. The most common subjects of puerperal convulsions are strong, healthy young women, pregnant for the first time; and an examination of the cases recorded by authors proves this fact. In them, the abdominal walls are most unyielding, and unable to relax under the pressure of the gravid womb. Cases of puerperal convulsions in subsequent pregnancies might be either toxæmic or non-toxæmic; the toxæmic cases might be classed under the following heads:—1. Persons who had never gone to the full time. 2. Persons of extreme muscular development. 3. Persons suffering from structural disease or obstruction of the kidney. 4. Excessive volume of uterine contents, including twin cases, &c. Dr.

Cormack was desirous of drawing attention to toxæmia as a cause of puerperal convulsions, and also of recognising non-toxæmic convulsions. He thought that Dr. Tyler Smith, who had treated this subject more philosophically than any preceding writer, had, while recognising toxæmia, attached too little importance to it.—*Med. Gaz.*

Treatment of Sterility. A new Instrument for deobstructing the Fallopian Tubes. By Dr. Tyler Smith.—This instrument, in the use of which the speculum is always required, consists of a small silver catheter, bent like the uterine sound, to adapt it to the curve formed by the uterus and vagina, and having a sudden lateral curve at the distal extremity, to the right hand or to the left, so as to point, when *in situ*, to the uterine mouth of the Fallopian canal, which it is proposed to examine. Through the catheter, a fine, flexible, whalebone bougie is passed into the Fallopian tube. When the small bougie is thus passed, so as to project at its Fallopian extremity, the instrument represents accurately the singular direction taken by the generative canal, from the mouth of the vagina to the fimbriated extremity of the tube. This novel operation proposes to bring an important organ under treatment, which has hitherto been removed from all interference, but is one requiring extreme caution in its employment.—*Lon. Jour. Med.*

Treatment of Encysted Tumors of the Labium.—By R. L. MacDonnell, M. D.—Four plans of treatment have been recommended for the cure of these tumors:—1. Complete dissection out of the whole of cyst—a plan which must be extremely difficult in most cases, in all, extremely painful, and in such a case as mine, quite impracticable. 2. Laying open the cyst, and filling it up with charpie. 3. Seton; and, 4. Removal of the fluid, and then compression, so as to bring the walls of the cyst into close contact. The plan of treatment which I have employed for some years past, has been to cauterize with nitrate of silver, the lining membrane of the cyst, so as to cause adhesive inflammation, and this process I have found to be so readily excited by the caustic, that I have never been obliged to repeat it a second time. In some instances I have touched the granulations, occasionally during the progress of the cure, for the purpose of hastening the filling up of the sac; and these were instances where I believed that the nitrate of silver had acted, not by inducing adhesive inflammation, but by effecting a change in the functions of the membrane, in consequence of which, it threw out granulations, instead of secreting, as formerly, a peculiar fluid. In every case in which I have used the nitrate of silver in this manner, a speedy cure has followed, unattended by any bad consequences, and the patient has not been aware, in the majority of instances, that anything beyond the mere puncture of the cyst has been attempted. When we reflect for a moment upon the difficulty of dissecting out a cyst even of moderate size, and upon the excessive pain the patient must endure, both in this operation and in the second and third I have mentioned, and when we recollect the extreme difficulty, if not impossibility, of applying accu-

rate pressure, it will be allowed that the method I propose is at least unattended with any of these inconveniences, and if it should prove in the hands of others as successful as it has done in mine, and I have little doubt but it will—it must be considered a plan of treatment preferable to any recommended for the cure of this disease.

The method of preparing the caustic may not be known to some of my readers, and I shall therefore make no apology for describing it.

A larg-sized probe should be dipped in caustic which has been rendered fluid by melting in a watch-glass, over a spirit-lamp or wax candle, until there is a complete coating of the caustic on the probe. When this cools, we have the nitrate of silver, in a form well suited for being conveyed through a small opening and into a deep cavity, and by bending the probe, we suit it to the shape of the cyst, and thus it can be brought into contact with all parts. In large cysts, such as that under consideration, I have had two or three probes thus prepared, as the quantity of caustic coating one is not enough for the extent of surface to which it must be applied.

This method of destroying cysts, I have been in the habit of employing in other diseases, as in the encysted tumors of the eye-lids, and in sebaceous encysted tumors; and lately I succeeded in curing a lady of a tumor of the shape, and about twice the size of an almond, which had been growing for some months on the left jaw, and which had resisted every plan of treatment proposed by her former attendant, who had at last recommended its extirpation.

The discovery of this method of conveying lunar caustic to deep recesses, has been ascribed by some of the writers in the *Dublin Quarterly Journal of Medicine*, to my friend Mr. Wilde; but the paper in which he first alludes to it, was submitted to myself as Editor of that periodical, before its management fell into his hands; and in a note referring to the matter, he attributed the discovery to Mr. J. Morgan, from whom he had learned it. I mentioned, at the time, that Mr. Morgan was not the discoverer, for the plan was quite familiar to myself and other surgeons long before Mr. Wilde's paper was written, and had been spoken of at a meeting of the Surgical Society, in connexion with the treatment of small nævi. The paper was published, and the obligation to Mr. Morgan omitted; and hence the origin of "Mr. Wilde's method of applying caustic."

MATERIA MEDICA AND THERAPEUTICS.

Glycerine and its Therapeutic Uses.—The employment of glycerine as a local application in the treatment of deafness, and also for other purposes as a medicinal agent, has induced us to offer a few remarks on the preparation and properties of this hitherto neglected body. To obtain glycerine, any fatty matter is saponified by a caustic alkali. The solution being decomposed by tartaric acid, which precipitates the fatty acid, is to be evaporated, and the glycerine dissolved out by strong alcohol. For medicinal use, it is best obtained by evaporating the water used in making *emplastrum plumbi*. Any lead which

it may contain is removed by a stream of sulphuretted hydrogen passed through it when in a diluted state. If necessary, it may be boiled with animal charcoal, filtered, and evaporated. It is a colorless syrup, sp. gr.=1.26 ; it dissolves in water and alcohol, but is insoluble in ether (Kane's Chemistry, 1849, p. 872). Glycerine undergoes no change by keeping, but it is decomposed by heat; and when mixed with yest, and kept in a warm place, is gradually decomposed, and converted into *metacetonic acid.* Its formula is $C_6H_7O_5+Aq$.

Glycerine has a strong attraction for moisture, and being of a bland, innocuous nature, it is obviously well adapted to afford a permanent moist covering to any part of the body to which it may be applied. It was first employed by Mr. Yearsley in cases of deafness arising from partial destruction of the membrane of the tympanum, and Mr. J. Wakley and others have extended its employment to all cases of deafness accompanied by dryness of the external meatus, and it is probable that in some cases of this kind, it may be more serviceable than the almond oil commonly employed to remedy a deficiency of cerumen. Dr. Patterson, of Edinburgh, has obtained some improvement in one of three cases in which he applied a small piece of cotton wool moistened with the glycerine, and introduced into the ear. When there is a loss or partial destruction of the tympanum, we are directed to use a very small quantity of wool, and to moisten it well with the glycerine. This is passed to the site of the membrane, and when there, ' the spot must be found which it is indispensable the wool should occupy and cover ; for then only, and not till then, will success attend the application, and the patient regain the hearing. Glycerine has been employed also as a local application in psoriasis, by Mr. Startin, and it is said with advantage.—*Pharm. Jour.*

On the Treatment of Sclerotitis by Hydriodate of Potash.—By R. L. MacDonnell, M. D.—In the administration of hydriodate of potash in ophthalmia, particularly when the inflammation is chiefly confined to the sclerotic, the same plan should be observed as when that remedy is used in inflammation of the fibrous membranes elsewhere, viz. : *to increase the dose steadily and daily if necessary, until a decided impression is made upon the local disease.*

The pain and throbbing of the eyeball will be much relieved by the use of a weak solution of atropia, (two grains to an ounce of water,) which not only acts as a *local anodyne,* but is the cleanest, cheapest, and most efficacious method of dilating the pupil, and thus preventing adhesions either to the cornea or lens. For this method of employing belladonna, I am indebted to the writings of Drs. Wilde and Jacob of Dublin.

I would remark that I do not claim for the hydriodate of potash, the properties of an *infallible* specific in the forms of ophthalmia alluded to, but I do believe most firmly that in the great majority of cases it will be found equally as useful as mercury, and not open to the objections which might be urged against that remedy, and much more successful than turpentine (which by-the-by cannot always be borne by the patient) in the very cases which experience proves to

be the best adapted for the employment of this latter medicine; and in addition, it recommends itself to our notice as a powerful alterative in certain states of the system in which turpentine is useless—and in which mercury would be injurious.

MISCELLANEA.

Death from Chloroform.—An accident of a very melancholy nature has just occurred in Glasgow. Dr. Adams, resident physician to the Clyde-street Hospital, having occasion to use chloroform, inhaled it himself to try its strength, but without any serious consequence; repeating, however, this experiment, and incautiously increasing the dose, the effect was fatal: he fell back, and immediately expired.—*Dub. Med. Press, Sept. 19th.*

Removal of Stains of Nitrate of Silver. By T. Collins.—If a solution of cyanide of potassium be added to a solution of nitrate of silver, a whitish precipitate of cyanide of silver immediately occurs. This precipitate is perfectly soluble in an excess of the cyanide of potassium, forming a colorless solution.

Black stains produced by nitrate of silver on the skin, nails, teeth, and on linen, &c., brushed over with a solution of cyanide of potassium (eight or ten grains of the salt to ℥j of distilled water) are similarly acted on. They will disappear after one or two applications if at all superficial; if even deeply seated in the textures, they may require several.

The cyanide of potassium is a cheap salt, and may be had at the Apothecaries' Hall, or from any respectable druggist. The solution should be made fresh, as it is liable to spontaneous decomposition.—*Dub. Med. Press.*

Creosote to remove the Taste of Cod-Liver Oil. By Dr. Barclay.—In a large number of cases of consumption in which I have used the oil during the last six months, I have found considerable difficulty in obviating the *sickness* which in many cases follows its administration. After trying in vain the essential oils, &c., I at last prescribed one drop of creosote in each dose of half an ounce of this oil; they mingle intimately, and I have much satisfaction in stating that it has succeeded in every instance (with one exception) in preventing even any nausea being felt by my patients, who liken the taste to that of red-herrings. *Provincial Journal.*

PART FOURTH.

EDITORIAL

AND

AMERICAN MEDICAL RETROSPECT.

Cod Liver Oil—*Its Therapeutic Value, etc.*—Recently, much has been said and written on this subject, and it is extremely difficult to find the experience of any two observers agreeing in every particular relating to the relative value of the three kinds in use, and their therapeutic results. It is not our intention to enter into an analysis of all that has been published on this subject, but to present to our readers simply some of the facts which appear to be most clearly established by reputable and careful observers, and then leave them to judge for themselves of the claims which this article presents to their attention. To many of our readers it may not be known, that so early as 1771, Percival* used this oil successfully, as a remedy in chronic rheumatism; and that in 1776, it was extensively used in the Manchester Infirmary, in the same disease, by Ray and Bardsley,† In 1822, the attention of the profession was more particularly called to it, by the publication by Schenck, of sixteen cases of chronic rheumatism treated by it successfully, and afterwards in 1826, the same author published twenty additional cases.‡ At this time, he advocated its beneficial use in gout and scrofulous affections. Between this period and the year 1832, it was extensively used in Germany, in a variety of affections in addition to those mentioned—such as scrofulous eruptions, coxalgia, rickets, sciatica, incontinence of urine, etc. etc. It did not, however,

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* Bullentin des Sciences Mèdicales, t. 2, p. 439.

† For thirty years, it is said the annual consumption of Cod-liver oil at the institution, averaged fifty or sixty gallons.

‡ Huefland's Journal, 1822—1826.

gain much of any credit out of that country, and that portion of Scotland where it first started, until 1840, when Dr. Donovan published his article on the subject.* This, together with the valuable monograph of Dr. Bennet,† which appeared in the following year, directed the attention of English observers to its use, and which has, at the present time developed a mass of evidence in its favor, truly surprising.

Within the last year, much additional information has been added to our knowledge of this agent. Dr. J. C. B. Williams, has given an able paper on its utility in phthisis, particularly in its last stages.‡ And there has lately appeared an English translation of De Jongh's work, which has been within a few weeks republished in this country.§ In this work, and in an article by Dr. Pereira,‖ may be found much additional information relative to the present state of our knowledge, of the chemical nature and therapeutic value of this oil. There are three kinds of Cod-liver Oil, which are particularly referred to and described by the above authors, and which may be found in market. These are the *pale, pale-brown* and *brown*. De Jongh thus describes them:—

1. *Pale cod-liver oil.*—Golden yellow; odor not disagreeable; not bitter, but leaving in the throat a somewhat acrid fishy taste; re-acts feebly as an acid; sp. gr. 0.923 at 63.°5. Fahr. Cold alcohol dissolves from 2.5 to 2.7 per cent. of the oil; hot alcohol from 3.5 to 4.5 per cent.; in ether it is soluble in all proportions.

2. *Pale brown cod-liver oil.*—Color that of Malaga wine; odor not disagreeable; bitterish, leaving a slightly acrid fishy taste in the throat; re-acts feebly as an acid; sp. gr. 0.924 at 63.°5. Fahr. Cold alcohol dissolves from 2.8 to 3.2 per cent. of oil; hot alcohol from 6.5 to 6.8 per cent. Ether dissolves it in all proportions.

3. *Dark brown cod-liver oil.*—Dark brown, is transmitted light greenish, in thin layers transparent; odor disagreeable, empyreumatic; taste bitter and empyreumatic, leaving behind in the fauces an acrid sensation; re-acts feebly as an acid; sp. gr. 0.929 at 63.°5. Fahr. Cold al-

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* Dublin Journal of Medical Sciences for July, 1840, p. 363.

† Treatise on the Oleum Jecoris, Aselli or Cod-liver oil, as a Therapeutic Agent, &c. By John Hughes Bennett, M. D., etc. London, Edinburgh and Dublin, 1841.

‡ London Journal of Medicine, No. 1, for January, 1849.

§ The three kinds of Cod-liver Oil: comparatively considered with reference to their Chemical and Therapeutic Properties. By L. J. de Jongh, M. D. Translated from the German, with an Appendix of Cases. By Edward Carey, M. D. To which is added an Article on the subject from "Dunglison's New Remedies." Philadelphia: Lea & Blanchard, 1849. 12mo. pp. 211.

‖ On Cod-liver Oil. By Jonathan Pereira, M. D., F. R. S., in the Pharmaceutical Journal and Transactions, Feb. 1st, 1849, p. 370.

cohol dissolves from 5.9 to 6.5 per cent. of it; hot alcohol from 6.5 to 6.9 per cent. In ether it is soluble in all proportions.

De Jongh found the principal constituents of these oils to be *oleate* and *margarate of glycerine*, possessing the usual properties. But they also contained *butyric* and *acetic acids, the principal constituents of the bile* (bilifellinic acid, bilifulvin, and cholic acid), *some peculiar principles* among which was the substance called *gaduin*) and not quite one per cent. of *salts*, containing iodine, chlorine, and traces of bromine. Moreover, he found that the oils always contained free *phosphorus*. (Pereira.)

The following table shows the proportions of the constituents in the three kinds of oil :—

Constituents.	Pale Oil.	Pale Brown Oil.	Brown Oil.
Oleic acid (with *gaduin* and two other substances,)	74.03300	71.75700	69.78500
Margaric acid,	11.75700	15.42100	16.14500
Glycerine,	10.17700	9.07300	9.71100
Butyric acid,	0.07436	—	0.15875
Acetic acid,	0.04571	—	0.12506
Fellinic and cholic acids, with a small quantity of margarine, oleine, and bilifulvin,	0.04300	0.06200	0.29900
Bilifulvin, bilifellinic acid, and two peculiar substances,	0.26800	0.44500	0.87600
A peculiar substance, soluble in alcohol,	0.01300	0.01300	0.03800
A peculiar substance, insoluble in water, alcohol, and ether,	0.00100	0.00200	0.00500
Iodine,	0.03740	0.04060	0.02950
Chlorine, and traces of bromine,	0.14880	0.15880	0.08400
Phosphoric acid,	0.09135	0.07890	0.05365
Sulphuric acid,	0.07100	0.08595	0.01010
Phosphorus,	0.02125	0.01136	0.00754
Lime,	0.15150	0.16780	0.08170
Magnesia,	0.00880	0.01230	0.00380
Soda,	0.05540	0.06810	0.01790
Iron,		—	a trace
Loss,	3.00943	2.60319	2.56900
Cod-liver Oil,	100.00000	100.00000	100.00000

In the foregoing table, there will be observed some difference in the composition of the three kinds of oil. Measures have been instituted which tend to show that these differences are the result of variations in the therapeutic quality of the oil; and De Jongh has attempted to

ascertain which of the three kinds is most beneficial in scrofula and rheumatism. From the somewhat limited number of cases in which he has put this matter to the test, he concludes, "that although all the three kinds of Cod-liver oil fulfil the same indications, still the brown effects this sooner, and we can therefore ascribe to it more powerful healing properties than to the two other kinds." These differences he attributes to the variations in their chemical relations and as the brown oil contains more biliary matter and butyric acid than any of the others, he thinks it "fair to assume that it owes its greatest power to these matters." In relation to the characters by which we may judge of the genuineness, purity and goodness of the oil, we know of no better tests than those proposed by Dr. Pereira. He speaks of them as follows—

"The physical characters which are usually employed, are principally color, odor and flavor. The finest oil is that which is most devoid of color, odor and flavor. The oil as contained in the cells of the fresh liver is nearly colorless, and the brownish color possessed by the ordinary cod-oil used by curriers is due to coloring matters derived from the decomposing hepatic tissues and fluids, or from the action of air on the oil. Chemical analysis lends no support to the opinion, at one time entertained, that the brown oil was superior, as a therapeutical agent to the pale oil. Chemistry has not discovered any substances in the brown oil which could confer on it superior activity as a medicine. On the other hand, the disgusting odor and flavor, and nauseating qualities of the brown oil, preclude its repeated use. Moreover, there is reason to suspect that, if patients could conquer their aversion to it, its free use like that of other rancid and empyreumatic fats, would disturb the digestive functions, and be attended with injurious effects.

Of the chemical characters which have been used to determine the genuineness of cod-liver oil, some have reference to the iodine, others to the gaduin or to the bile constituents. I have already stated that some fraudulent persons are said to have admixed iodine (either free iodine or iodide of potassium) with train oil to imitate cod-liver oil. The presence of this substance may be readily detected by adding a solution of starch and a few drops of sulphuric acid, by which the blue iodide of starch is produced; or the suspected oil may be shaken with alcohol, which abstracts the iodine."

The evidence which we now possess of its therapeutic value, undoubtedly claims for it a place (and that we are led to believe an important one) in our Pharmacopœia. And as will be seen in looking over what has been written, it deserves attention and trial in the following diseases, viz.: those proceeding from mal-assimilation, (as Dr.

Prout terms it,) embracing chronic rheumatism, gout, and the various affections arising from the local manifestations of a scrofulous diathesis, etc. etc. It has proved of service in scrofulous caries,ophthalmia, tabes mesenterica, tubercular meningitis and peritonitis, in phthisis pulmonalis in its early stages, etc. etc. In various eruptions of the skin, such as eczema, herpes and impetigo, particularly when dependent upon a disordered nutrition. There are many other diseases in which it has been used, but the evidence of its utility in them is so contradictory, that we have thought best not to enumerate them. It appears to us, from the trial which we have given it, that its use will prove more satisfactory in the commencement of certain forms of phthisis, unaccompanied with diarrhœa, than in any one disease. In the strumous affections of children it deserves our confidence. It is truly surprising often, to witness the improvement in general health and fatness which the little sufferer manifests after having been placed upon its use. Speaking on this point, Dr. Carey, the able translator of De Jongh's work, says, "In the pale, cachectic child, where the powers of life are low, it affords nourishment to the body. When none other can be borne; restores the functions of digestion, and furnishes the frame with fat in a truly wonderful manner.

The following is the result of Dr. Williams' experience in its use in 400 cases of phthisis, 234 of these cases are recorded in his Note Book; and by a London reviewer are thus classified:— "Among these 234, there were 9 cases in which the oil disagreed, 19 in which it appeared to do no good, and 206 in which its use was followed by marked and unequivocal improvement. Of the 206 patients, 62 had cavities; all of these improved materially under the use of the oil; in 34 the improvement has continued; in 11 the improvement was only temporary; in 17 the patients were lost sight of. In 100 patients the tubercles had commenced to soften, but actual cavities had not formed, and both physical and general symptoms materially and rapidly changed for the better. The process of softening seemed arrested, as the moist rhonchi in the supra or infra-clavicular or the supra-spinous regions gradually ceased, the dullness more or less disappeared, and at last vesicular breath-sound returned, and no physical signs whatever remained, except a little prolonged and, perhaps, tubular expiration. Coincidently with these changes, the constitutional symptoms disappeared. In the remaining 44 patients, the disease was in the early stage, and the results were not less satisfactory. Eleven of the advanced cases are related as illustrations of the degree of improvement."

With respect to its mode of operation upon the system no satisfactory explanation has as yet been given, all that has been said upon the subject is vague and unsatisfactory. The usual dose for an adult is half ounce twice a day. It should be discontinued for a time, if it produces any manifestations of derangement of the stomach, which is sometimes the case. Professor Christison thinks that it will be best to begin with a teaspoonful at a dose in order to lessen the risk of nausea and vomiting being produced by mere prejudice and disgust. Those who have had most experience in its use advise its administration simply or alone, and afterwards a little sugar and cinnamon powder to remove the after-taste. No form of emulsion is any improvement according to Bennet. For the benefit of those who may desire it, we subjoin some recent formulæ.

For Internal Use.

Take of cod-liver oil, syrup of orange-peel, aniseed water, each an ounce, oil of calamus three drops. A table-spoonful three times a day. [Roesch.]

Take of cod-liver oil four ounces, solution of carbonate of potash half an ounce, syrup of orange or lemon-peel two ounces, caraway water half an ounce, spirit of caraway half an ounce. Mix. Two spoonfuls three times a day.—[Dr. Neligan.]

Take of cod-liver oil and Malaga or Hungary wine, of each four ounces, powdered Gum Arabic, one ounce; make an emulsion, and add syrup of orange-peel, one ounce; spirit of peppermint, two drachms. Two tablespoonfuls twice or thrice a day.—[Brefeld.]

Syrup.—Take of cod-liver oil, eight ounces powdered Gum Arabic five ounces; water, twelve ounces; simple syrup, four ounces; form an emulsion, and dissolve in it twenty-four ounces of powdered sugar, to form a syrup. Dose, one or two table-spoonfuls gradually increased. [Duclos.]

For External Use.

Take of cod-liver oil, half an ounce; liquor of potash, half a drachm; lard sufficient to form an ointment.—[Dr. Neligan.]

Take of cod-liver oil, ten drachms; liquid diacetate of lead, five drachms; lard, ten drachms. Mix.—[Brefeld.]

Take of cod-liver oil, six drachms; liquid diacetate of lead, four drachms; yolk of egg, four drachms. Mix.—[Brefeld.] To be applied on lint to scrofulous ulcers.

In conclusion we would say, that it is difficult to believe that the accumulative evidence which now presents itself to our notice of the value

of Cod-liver oil as a therapeutic agent, can by any possibility be erroneous. Still it may be, and we doubt not is, overrated. These conditions are likely to occur when any new remedy is presented to our attention, and are only to be corrected by a greater experience and a proper limitation of zeal. We have been in the habit of using an article of the transparent brown oil, procured from the fresh cod-liver by Messrs. Rushton, Clark & Co.,* which has given us the best of satisfaction, and upon which we think the profession can safely depend.

Bellevue Hospital.—We are happy state, for the benefit of our readers, that the Medical Board of Bellevue Hospital, having completed their organization, under the new law, have, as will be seen from a notice in our columns, established a regular system of clinical instruction.

The days for lectures will be ascertained by referring to the notice. In addition to this, students are at liberty to visit the wards, with the medical and surgical officers, during their daily visits, which are made at noon. We cannot refrain from congratulating the profession on having thus placed at their disposal, means for observation and improvement, such as are possessed by few, if by any institutions in America. We may state that the average number of patients in hospital is between five and six hundred.

New-York Society for the Relief of the Widows and Orphans of Medical Men.—The annual dinner of this truly-meritorious Society took place on the 20th of November last, at the Astor House. At which time 161 were present. The annual meeting of the Society, with several particulars relating to the same, we learn from the secretary, was held on the 28th of the same month, when the following officers were chosen for the ensuing year:—Edward Delafield, M. D., *President;* S. C. Bliss, M. D., Valentine Mott, M. D., and Alexander H. Stevens, M. D., *Vice-Presidents;* Isaac Wood, M. D., *Treas.;* and H. D. Bulkley, M. D., *Secretary.* The whole number of members is seventy-three. Six members† have died since the organiza-

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* Vide Advertisement in this number.

† Since the receipt of a note from the Secretary, containing in part some of the above particulars, death has been busy in the ranks of our profession; and it becomes our melancholy duty to add another to this list, viz.: the name of Dr. Luke Barker.—[Ed. *N. Y. Jour. Med.*]

tion of the society in 1842. Three within the present year. The amount of funds of the society, according to the Report of the Treasurer, in September was $6926 08, nearly all of which is invested in bonds and mortgages at 7 per cent. We fear that the profession at large ought to know more about this society. Its objects, aims and ends are in an eminent degree worthy of a greater attention and *support*, and we would earnestly submit, shall the operations of this valuable charity be circumscribed or even embarrassed by the apathy of those members of a liberal profession who are abundantly able to aid and advance its legitimate design? We sincerely hope not.

ANATOMY AND PHYSIOLOGY.

OBSERVATIONS ON THE SIZE OF THE BRAIN IN VARIOUS RACES AND FAMILIES OF MAN. By SAMUEL GEO. MORTON, M. D. (*Proc. of the Amer. Acad. of Nat. Sci., Oct.*, 1849.)—I have great pleasure in submitting to the Academy the results of the internal measurements of six hundred and twenty-three human crania, made with a view to ascertain the relative size of the brain in various races and families of Man.

These measurements have been made by the process invented by my friend Mr. J. S. Phillips, and described in my Crania Americana, p. 253, merely substituting leaden shot, one-eight of an inch in diameter, in place of the white mustard-seed originally used. I thus obtain the *absolute capacity of the cranium, or bulk of the brain, in cubic inches;* and the results are annexed in all those instances in which I have had leisure to put this revised mode of measurement in practice. I have restricted it, at least, for the purpose of my inferential conclusions, to the crania of persons of sixteen years of age and upwards, at which period the brain is believed to possess the adult size. Under this age, the capacity-measurement has only been resorted to for the purpose of collateral comparison; nor can I avoid expressing my satisfaction at the singular accuracy of this method, since a skull of a hundred cubic inches, if measured any number of times with reasonable care, will not vary a single cubic inch.

All these measurements have been made with my own hands. I at one time employed a person to assist me; but having detected some errors in his measurements, I have been at the pains to revise all that part of the series that had not been previously measured by myself. I can now, therefore, vouch for the accuracy of these multitudinous data, which I cannot but regard as a novel and important contribution to Ethnological science.

I am now engaged in a memoir which will embrace in detail the conclusions that result from these data; and meanwhile I submit the following tabular view of the prominent facts.

TABLE,

Showing the Size of the Brain in cubic inches, as obtained from the internal measurement of 623 Crania of various Races and Families of Men.

RACES AND FAMILIES.	No. of Skulls.	Largest I. C.	Smallest I. C.	Mean.	Mean.
MODERN CAUCASIAN GROUP.					
TEUTONIC FAMILY.					
Germans,	18	114	70	90	92
English,	5	105	91	96	
Anglo-Americans,	7	97	82	90	
PELASGIC FAMILY.					
Persians,	10	94	75	84	
Armenians,					
Circassians,					
CELTIC FAMILY.					
Native Irish,	6	97	78	87	
INDOSTANIC FAMILY.					
Bengalees, &c.,	32	91	67	80	
SEMITIC FAMILY.					
Arabs,	3	98	84	89	
NILOCTIC FAMILY.					
Fellahs,	17	96	66	80	
ANCIENT CAUCASIAN GROUP.					
From the Cataco'bs. PELASGIC FAMILY.					
Græco-Egyptians,	18	97	74	88	
From the Cataco'bs. NILOCTIC FAMILY.					
Egyptians,	55	96	68	80	
MONGOLIAN GROUP.					
CHINESE FAMILY.	6	91	70	82	
MALAY GROUP.					
MALAYAN FAMILY.	20	97	68	86	85
POLYNESIAN FAMILY.	3	84	82	83	
AMERICAN GROUP.					
TOLTECAN FAMILY.					79
Peruvians,	155	101	58	75	
Mexicans,	22	92	67	79	
BARBAROUS TRIBES.					
Iroquois,	161	104	70	84	
Lenapé,					
Cherokee,					
Shoshoné, &c.					
NEGRO GROUP.					
NATIVE AFRICAN FAMILY.	62	99	65	83	83
AMERICAN-BORN NEGROES.	12	89	73	82	
HOTTENTOT FAMILY.	3	83	68	75	
ALFORIAN FAMILY.					
Australians,	8	83	63	75	

The measurements of children, idiots and mixed races are omitted from this table, excepting only in the instance of the Fellahs of Egypt, who, however, are a blended stock of two *Caucasian* nations—the true Egyptian and the intrusive Arab, in which the characteristics of the former greatly predominate.

No mean has been taken of the Caucasian race* collectively, because of the very great preponderance of Hindu, Egyptian and Fellah skulls over those of the Germanic, Pelasgic and Celtic families. Nor could any just *collective* comparison be instituted between the Caucasian and Negro groups in such a table, unless the small-brained people of the latter division (Hottentots, Bushmen and Australians) were proportionate in number to the Hindoos, Egyptians and Fellahs of the other group. Such a computation, were it practicable, would probably reduce the Caucasian average to about 87 cubic inches, and the Negro to 78 at most, perhaps even to 75, and thus confirmatively establish the difference of at least nine cubic inches between the mean of the two races.*

Large as this collection already is, a glance at the Table will show that it is very deficient in some divisions of the human family. For example, it contains no crania of the Eskimaux, Fuegians, Californians or Brazilians. The skulls of the great divisions of the Caucasian and Mongolian races are also too few for satisfactory comparison, and the Sclavonic and Tchudic (Finnish) nations, together with the Mongol tribes of Northern Asia and China, are among the especial *desiderata* of this collection.

Among the facts elicited by this investigation are the following:

1. The Teutonic or German race, embracing, as it does, the Anglo-Saxons, Anglo-Americans, Anglo-Irish, &c., possesses the largest brain of any other people.

2. The nations having the smallest heads, are the ancient Peruvians and Australians.

3. The barbarous tribes of America possess a much larger brain than the demi-civilized Peruvians or Mexicans.

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* It is necessary to explain what is here meant by the word *race*. Further researches into Ethnographic affinities will probably demonstrate that what are now termed the *five races* of men, would be more appropriately called *groups;* that each of these groups is again divisible into a greater or smaller number of primary races, each of which has expanded from an aboriginal nucleus or centre. Thus I conceive that there were several centres for the American group of races, of which the highest in the scale are the Toltecan nations, the lowest the Fuegians. Nor does this view conflict with the general principle, that all these nations and tribes have had, as I have elsewhere expressed it, a common origin; inasmuch as by this term is only meant an indigenous relation to the country they inhabit, and that collective identity of physical traits, mental and moral endowments, language, &c., which characterize all the American races. The same remarks are applicable to all the other human races; but in the present infant state of Ethnographic science, the designation of these primitive centres is a task of equal delicacy and difficulty. I may here observe, that whenever I have ventured an opinion on this question, it has been in favor of the doctrine of *primeval diversities* among men—an original adaptation of the several races to those varied circumstances of climate and locality, which, while congenial to the one, are destructive to the other; and subsequent investigations have confirmed me in these views. See *Crania Americana*, p. 3; *Crania Ægyptiaca*, p. 37; *Distinctive Characteristics of the Aboriginal Race of America*, p. 36; *Silliman's American Journal of Science and the Arts*, 1847; and my *Letter to J. R. Bartlett, Esq.*, in Vol. 2 of the Transactions of the Ethnological Society of New-York.

4. The ancient Egyptians, whose civilization ante-dates that of all other people, and whose country has been justly called "the cradle of the arts and sciences," have the least-sized brain of any Caucasian nation, excepting the Hindoos; for the very few Semitic heads will hardly permit them to be admitted into the comparison.

5. The Negro brain is nine cubic inches less than the Teutonic, and three cubic inches larger than the ancient Egyptian.

6. The largest brain in the series is that of a Dutch gentleman, and gives 114 cubic inches; the smallest head is an old Peruvian, of 58 cubic inches; and the difference between these two extremes is no less than 56 cubic inches.

7. The brain of the Australian and Hottentot falls far below the Negro, and measures precisely the same as the ancient Peruvian.

8. This extended series of measurements fully confirms the fact stated by me in the Crania Americana, that the various artificial modes of distorting the cranium, occasion no diminution of its internal capacity, and consequently do not affect the size of the brain.

On Minute Anatomical Injections.—*A new Material and Process.* By P. B. Goddard, M. D.—Having received recently from Europe some beautiful microscopic preparations, consisting of minute injections by Prof. Hyrtyl, Messrs. Hett, Dancer and Topping, I was stimulated to make an effort to obtain similar results, as they were, by far, finer than any which had been produced in this country. With the assistance of my friend, Dr. Neill, demonstrator of the University of Pennsylvania, I made many experiments with variable results, but with such success as to lead to further investigation. At last I struck upon a plan which is uniformly productive of exquisitely beautiful results, and is moreover easy of application. For the purpose of making such an injection, the anatomist must provide himself with a small and good syringe; some vermillion *very finely* ground in oil;* a glass stoppered bottle, and some sulphuric ether. The prepared vermillion paint must be put into the ground stoppered bottle, and about twenty or thirty times its bulk of sulphuric ether added; the stopper must then be put in its place and the whole well shaken. This forms the material of the injection. Let the anatomist now procure the organ to be injected, (say a sheep's kidney, which is very difficult to inject in any other way, and forms an excellent criterion of success), and fix his pipe in the artery, leaving the *vein open.* Having given his material a good shake, let him pour it into a cup and fill the syringe. Now, inject with a *slow, gradual* and *moderate* pressure. At first, the matter will return by the vein colored, but in a few moments this will cease, and nothing will appear except the clear ether, which will distil freely from the patulous vein. This must be watched, and when it ceases the injection is complete. The kidney is now to be placed in warm water of 120° Fahrenheit, for a quarter of an hour, to drive off the ether, when

* That which I have used was obtained already prepared in tin tubes, at J. W. Williams', No. 37 North Sixth Street, who has obligingly assisted me to obtain the finest colors.

it may be sliced and dried, or preserved in alcohol, Goadby's solution, or any other anti-septic fluid. For glands, as the kindey, liver, &c., it is better to dry and mount the sections in Canada balsam: but for membranous preparations, stomach, intestine, &c., the plan of mounting in a cell, filled with an anti-septic solution is preferable.—*Med. Exam.*

PATHOLOGY AND PRACTICAL MEDICINE.

Epidemic Scarlatina. By Prof. John P. Harrison.—As regards the philosophy of the *modus agendi* of great epidemical influences, it is certain that they sweep aside all others, and take possession of men's constitutions. We must always have regard to every epidemical influence when treating any particular one. If we treat scarlet fever simply as a distinct fever, without any regard to other epidemical influences that may be prevalent, we will commit a great mistake.—Where erysipelas has been prevailing, it has aggravated the scarlatina. Choleraic influence modifies other diseases. In 1832, every fever patient who was purged, died. Sydenham has well said "that wherever a disease prevails it leaves its livery behind." In the treatment of scarlet fever the non-interfering plan is a bad one—I have no faith in it. There are three things to be studied in every disease, and especially in scarlet fever. 1st. The physiological laws of disease. 2d. The pathological laws. 3d. The constitution of the patient, as modified by the disease. Scarlet fever is a self-limited disease; we must then recollect this pathological law. Irritation predominates over inflammation. What do we observe? great frequency of the pulse, indicating shock; the patients are frequently carried off by spasms. The sustaining treatment is then the only correct one. If patients die of secondary disease of the brain, in this disease, we find nothing morbid in it. I do not believe it is our duty to stand by and do nothing.—We ought to study every disease and interfere. There is an indication to be fulfilled in this disease. No man, then, is warranted in practising, unless he has an indication. The stimulating practice is not a new one. Bateman and Heberden used the stimulating course in several forms of cutaneous disease.—*Ohio Med. Sur. Jour.*

Chlorosis; its Treatment by Sulphate of Iron. By R. Jarrot.—Iron in some form is known to every practitioner to be adapted to simple Chlorosis, but the sulphate in my hands has proven to be by far the best preparation of this metal. My common practice is to combine it with aloes and myrrh, though the latter article is not indispensable. It will generally be found that great torpor prevails of the whole mucous surface of the intestinal tube, and that the lower bowels are distended, sometimes to their greatest capacity, with the various secretions within their cavity. Part of this returns to the circulation where it produces well-known effects. It is obvious, therefore, that the bowels should be operated upon before resorting to the tonic. An excellent combination

for this purpose is calomel, rhubarb and aloes. It should be repeated day after day, until thorough evacuations are procured and the stools become natural. This being effected, a pill of one grain of each sulphas ferri, aloes and myrrh is to be given thrice daily, morning, noon and bed-time. Twice a week, at bed-time, some blue mass, or other mercurial is to be substituted for the tonic pill. In ordinary cases this treatment will suffice, and it should be prolonged for an indefinite period, or until health is restored. The quantity of the sulphate in each pill should be lessened or increased, according to the capacity of the system to bear it. Sometimes nausea, griping pains and other unpleasant effects follow its use, in which event the quantity should be lessened or the wine mixture mentioned below used in its place. I have given as much as ten grains daily, or three and one-third grains to each pill. In general, two grains to each pill may be considered as the average quantity adapted to ordinary cases. The copperas should be burnt before it is made up into pill, and this can be very conveniently done, with the aloes and myrrh by means of the extract of gentian. A neat formula for the exhibition of the iron is the following: —Port Wine, 1 qt., tinct. Aloes, iv. ℥, tinct. Myrrh, ij ℥. Dose, a table-spoonful thrice daily, with the mercurial twice during the week, as above directed. I have prescribed this formula in some cases of suppressed menstruation, with the happiest effects.—*Charleston Med. Jour. & Rev.*

Treatment of Dysmenorrhœa.—By Dr. N. Ward, of Burlington, Vermont.—(*Amer. Jour. Med. Sci.*)—Reports that in several cases of painful menstruation, he has obtained the best results from the use of ½ gr. of sulph. ferri, with a slightly laxative dose of sulph. magnesia, every day during the interval of the monthly periods, or for the last ten days of the interval.

SURGERY.

Treatment of Gun-Shot Wounds. By Prof. B. W. Dudley.—The following treatment of gun-shot wounds is illustrated by a number of cases in the Transylvania Medical Journal for Dec., from which we make the following selection.

"Being long since convinced of the error propagated in the profession, regarding the peculiarity of these wounds, my solicitude in all cases which have been placed under my charge, has been by the aid of properly-adjusted pressure; to preserve the surfaces of the interior lacerated fibres pressed closely together; to close the cutaneous openings and confer thereby all the advantages upon this wound, which are known to attend one from subcutaneous section; to prevent all tumefaction, inflammation and its consequences by the skilful distribution

of pressure above, below, as well as upon the seat of the injury; to apply the dressing with that very moderate force only, which is necessary to secure these purposes, and which at the same time imposes unconditional quiet on all the muscles involved in, or associated with the wounded part. Credulity need not be startled at the suggestion of suspending all disposition to muscular contraction by the bandage. By its agency, fractures of the patella unite as promptly and as thoroughly by bone, as do other bony structures; and where proper attention is bestowed in extension and counter-extension before the application is made, it is not less triumphant in cases of fractured cervix femoris. Instead of loss in length or symmetry in fractured bones, a common occurrence under the use of ordinary implements, I have, within the last quarter of a century, in very many instances, after the extraction of an entire dead bone, caused the construction of a new one in its place, of equal dimensions, by the aid of the roller, which suspended muscular movements, subdued swelling and inflammation, and thereby left nature free to reconstruct the lost bone. The dead phalanx in cases of bone felon is here referred to.

Fracture and Depression of the Skull in a Child relieved by Cups. By W. L. Moultrie, M. D.—(*Charleston Med. Jour. and Rev.*)—A negro child, 5 months old, the property of the Hon. T. Bennett, of Mepshew plantation, was brought into my office on the morning of the 2d of May, 1849, having incurred a fracture and indentation of a large portion of the right parietal bone, the depression being sufficient to contain with ease the bowl of a large table-spoon. The child had, as represented by both mother and nurse, who brought him to me, been in a state of insensibility from the time they first discovered the accident, (the time and manner of the occurrence of which they could give no information,) until he arrived at my office—a period of time judging from the distance travelled, on foot, and the time otherwise occupied in receiving instructions relative to it from the owner, must have taken up at least half an hour.

The application of the cupping instruments two or three times, until they could be brought to work effectively together with the addition of traction upon the cup when it had taken firm hold, completely and easily effected entire restitution of the bone to its natural position. It is now upwards of two months since the accident, and the child is without the occurrence of any evil result from the injury. Simple as this case is, it is not without its teaching. The ease with which, in this instance, the object was attained, affords abundant reason to believe, that in similar cases of older subjects, where the bones of the head have attained even greater development and firmness, the cups would yet be adequate to accomplish the elevation of bone fractured and depressed by violence, and in this way probably supersede for the time the necessity of operating by incisions and the use of the trephine and elevator, at all times requiring great surgical skill and mechanical dexterity.

Treatment of Aneurism by Compression with Bandages. By Prof. Dudley.—The August number of the Transylvania Medical Journal

contains a paper from Prof. Dudley on the treatment of Aneurism. In the October number we find the following analysis of the results of the cases, and mode of treatment as set forth in the paper. Of the cases reported in the article, five of them were cured by compression, as the principal means.

Two resisted that treatment and required the ligature.

The axillary aneurism and that of the internal carotid, of course, were not cases in which compression was admissible, or even practicable.

Four other cases of internal aneurism, selected from many of a similar nature, represent a class in which constitutional measures form the only remedial resource.

The first case of aneurism was successfully treated with the bandage, by Prof. Dudley, in 1814; and since the year 1818 he has taught the practice to every successive class attending the medical school with which he has been connected.

In the use of this agent, for any purpose, much injury may be done by its improper application. It is an instrument of power, for evil, as well as for good. If it is desired to apply the roller and compresses, for a popliteal aneurism, for instance, the leg should be gently encircled by regular and successive turns from the toes to the lower border of the swelling—just force enough should be employed to adapt the dressing smoothly and firmly to the limb. A pledget of cloth should then be laid over the tumor, and secured by the ascending rolls of the bandage. From Poupart's ligament to the point where the femoral artery passes through the adductor muscle, a long and firmly rolled pledget should be placed—the skin being protected by a slip of oiled silk—and then, the bandage must be brought up around the thigh to press this in upon the course of the vessel with force sufficient to diminish decidedly the pulsation in the tumor. The bandage around the foot and leg prevents swelling, and tends to diminish the amount of fluid circulating in the limb. At each successive application of the dressing, the pressure may be increased without additional pain to the patient. Perfect quietude should be enjoined—the limb sustained in a slightly elevated position—and medicines employed to lower the action of the heart and arteries. We have seen several cases thus treated and the suffering was really inconsiderable. It is not necessary to apply force enough to close the artery completely, and it is rare that a patient will be found of sufficient fortitude to tolerate a degree of pressure, thus applied, which would be productive of injurious effects; so that we have, in the sensations of the patient, and the condition of the tumor, sure and safe indices by which to direct the treatment.

Ligatures made of Animal Substances. By W. T. Wragg.—Ligatures, made of the fibrous tissue of the deer, dried and twisted so as to form a small round thread, have been recently employed by Mr. Wragg, with complete success in tying and obliterating arteries. This gentleman amputated the leg of a woman over 60 years of age; he tied the arteries with ligatures made of the fibrous tissue of the deer, and cut the ends of the ligature close to the knot, and brought the

wound together. At the end of three weeks the stump was entirely healed. No part of the ligature was afterwards seen; nor were there any abscesses nor ulceration indicating that the ligature acted as a foreign body. It was completely absorbed. He has repeatedly tied the femoral, brachial, tibial and other large arteries with this species of ligature, and in almost every instance, the result has been satisfactory —proving that the ligature was entirely removed by absorption. This is a valuable addition to practical surgery, and the method is worthy of consideration.—*Charleston Med. Jour.*

MISCELLANEA.

St. Vincent's Hospital.—Since our last issue, a new hospital under the supervision and management of the "Sisters of Charity" has been opened. For some two years or more, the initiatory steps have been in progress for the establishment of this institution. A very eligible location, with the necessary accommodations, have been obtained in Thirteenth-street, between Third and Fourth Avenues. And the following-named gentlemen have been appointed as medical officers to the same, viz.: Valentine Mott, M. D., *Consulting Physician and Surgeon;* Wm. Powers, M. D., and Wm. Murray, M. D., *Attending Physicians;* W. H. Van Buren, M. D., and S. W. Schmidt, Jr., M. D., *Attending Surgeons.* We understand that the terms of admission into this hospital are the same as those of the City Hospital, viz.: $3 per week.

The Physicians' Diary.—We have received from the publishers, Messrs. Bell & Gould, a copy for 1850, of this neatly-printed companion for the physician. It contains many important and interesting items for the physician, among others a Directory of all the Physicians and Dentists in the city of New-York, also a List of all the Public Institutions, etc. Aside from the fact that it contains a space for memorandums for each day in the year, the interesting information it contains ought to place it in the hands of every physician and dentist in the city.

Contributions to Physiology.—This is the title of a pamphlet of about 25 pages, written for, and republished from, the New-Orleans Medical and Surgical Journal, by Bennett Dowler, M. D. The labors of this indefatigable physiologist, his anatomical examinations made upon the great Saurian of Louisiana, have, we are pleased to say, corrected numerous prevalent errors, and have resulted in discoveries which have important bearings upon the doctrines of physiology. His experiments and vivisections have led him to conclude, as will be seen in this tract, and contrary to what is generally believed, "That voluntary motion is neither directly communicated from, nor regulated by the brain, or the cerebellum; that the muscles, in connection with the spinal marrow, perform voluntary motions for hours after having been

severed from the brain; that these motions are not only entirely independent of the brain, but may take place, though imperfectly, after the destruction of the cord itself; that the trunk, as well as the brain, thinks, feels and wills, or displays psychological phenomena; that the *sensorium* is not restricted to a single point, but is diffused, though unequally, or in a diminished degree, in the periphery of the body; and that actions which take place after decapitation, as described above, are in absolute contrast to *reflex actions*, being sensational, consentaneous, voluntary, and in other respects, dissimilar."

On the Spread of Asiatic Cholera.—We have received from Prof. J. Evans, M. D., a pamphlet of forty-three pages, being an article communicated to and republished from the North Western Medical and Surgical Journal. It is based principally on observations made during the prevalence of the disease recently in Chicago, and from which he draws the conclusion that it is a communicable disease. Its mode of communication he does not legitimately explain, but says that he is "satisfied that the communication in cholera can be more certainly traced than in rubeola or even variola, because a less time elapses between exposure and attack. This rapidity of the action of the poison on the other hand, makes it by far more difficult to follow the disease in its diffusion, for it will seem to appear simultaneously in distant parts of a city at a very early day after its introduction. The rapidity of the disease too, may account for the greater prevalence at the outset and gradual subsidence, as those acutely susceptible are speedily affected, while in the decline only those take it who subsequently become proper subjects."

Report of the Board of Health on Cholera.—This report has been lying on our table for some weeks. It does credit to the Medical Council of the Sanitary Committee; and we are proud in being able to say that it will compare favorably with any report on this disease which has ever been presented to the American public. It was our intention to have given in this number an extended notice of the same, but the length of the original department is an apology for the omission.

Recent Publications.—Neligan's Materia Medica, by B. W. McCready, M. D., a work peculiarly adapted to the wants of students, and highly recommended for such by Professors J. B. and T. R. Beck, it is republished with additions from the second Dublin edition.

Prof. Dickson's Pathology and Practice of Medicine. A neat edition with additions. It is particularly deserving of the attention of students of medicine, and the young practitoner for whom it is more especially designed.

Prof. Davis's Introductory.—This address on "Free Medical Schools," by the late editor of the Annalist, now Professor of Physiology and Pathology in the Rush Medical College, Chicago, contains a novel announcement. It appears from it, that he and his colleagues "have resolved to commence the work of reform at once, and in earnest." As proof of this, they "this session, offer to all the matriculated students of the college, the tickets of three of the professors *free of charge*," and it is their "settled policy to go still further another year, and not stop until all are alike *gratuitous to the faithful cultivators* of our noble science." Surely this is an age of progress—an age of "reform." Is there any evidence now wanting of it?

Rare and Valuable Medical Works.—We were shown at Messrs. Woods book-store, a few days since, a very large collection of splendid and valuable medical works which have been recently imported by them. We ardently hope that the enterprising spirit which has placed them before our countrymen will not be suffered to languish or go unrewarded, but that the opportunity which is there presented for our college libraries, as well as those of private practitioners, to become supplied with rare and desirable works, will not be allowed to pass by unheeded. For a list of many of these works, our readers are referred to the advertising sheet of this number.

Clinical Instruction.—By direction of the Medical Board of Bellevue Hospital, regular clinical instruction will be given until further notice, on Monday and Saturday of each week, between the hours of 1 and 3, P. M.

John T. Metcalfe, M. D.,
Secretary.

Dec. 10th, 1849.

OBITUARY.

Death of Dr. Gallup.—Recently at his residence in Woodstock, Vt., Joseph Gallup, M. D., in the 81st year of his age. He contributed somewhat extensively to the medical literature of our country. His history of epidemics in Vermont will be remembered in the profession as a lasting monument to his memory.

Meikleham, D. S., M. D., in this city, on the 20th of November last, of arachnitis. Dr. Meikleham was an erudite scholar, and for some time edited with great ability the "New-York Medical Intelligencer." To those who were most intimately acquainted with him, his loss will be deeply felt.

Barker, Luke, M. D., at his residence in this city, on the 13th of December last, of pneumonia, aged 59 years.

McNairy, John E., M. D., on the 18th of August last, aged 31 years. He was superintendent of the Lunatic Asylum of the state of Tennessee.